AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				ACT ID CODE 05-B0004	PAGE OF PAGES 1 1 2
2. AMENDMENT/MODIFICATION NO. 001	EFFECTIVE DATE 6 JUL 2005	4. REQUISITION/PURCHAS	E REQ. NO.	5. PROJECT N	IO. (If applicable)
6. ISSUED BY		7. ADMINISTERED BY (If of	ther than Item 6)		
LOS ANGELES DISTRICT, CORPS OF EN P.O BOX 532711 LOS ANGELES, CALIFORNIA 90053-232					
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county,	State and ZIP Code)		(x) 9A. AMEN	NDMENT OF SOLICITA	ATION NO.
			X W912P	L-05-B0004	
				L 2005 (BID	•
				DIFICATION OF CONT	RACT/ORDER NO.
CODE FA	CILITY CODE		10B. DAT	ED (SEETTEM 13)	
		AMENDMENTS OF SO	L L OLICITATIONS	 }	
The above numbered solicitation is amended as set forth in Item				is not extended.	
Offers must acknowledge receipt of this amendment prior to the hour (a) By completing items 8 and 15, and returning copies of the a telegram which includes a reference to the solicitation and amendmen OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY R change may be made by telegram or letter, provided each telegram or	imendment; (b) By acknowl it numbers. FAILURE OF YO ESULT IN REJECTION OF Y	ledging receipt of this amendment DUR ACKNOWLEDGMENT TO B YOUR OFFER. If by virtue of this	t on each copy of the E RECEIVED AT The amendment you des	e offer submitted; or HE PLACE DESIGNAT sire to change an offer	ÈĎ FÓR THE RECEIPT already submitted, such
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
IT MODIFIES	THE CONTRACT/ OF	DIFICATIONS OF CON RDER NO. AS DESCRIE	BED IN ITEM 1	14.	
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (S	, ,				
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODI FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY (OF FAR 43.103(b).	,	h as changes in pay	ing office, appropriation	n date, etc.) SET
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO	O PURSUANT TO AUTHORI	ITY OF:			
D. OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor ⊠ is not, ☐ is re				ng office.	
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized b TRES RIOS ENVIRONMENTAL RESTORATION THE BID OPENING DATE is hereby	ON FLOOD CONTR	OL-NORTH LEVEE-F	HASE 1A, N		UNTY, ARIZONA
1. REPLACE THE EXISTING SPECIFICA	TIONS SECTIONS	WITH THE FOLLOW	ING.		
1. 00100 INSTRUCTION TO BIDDE 2. 01200 GENERAL REQUIREMENTS 3. 01270b MEASUREMENT AND PAYM 4. 01200 DIVERSION AND CONTRO 5. SF1442 SOLICITATION, OFFER,	ENT L OF WATER				
Except as provided herein, all terms and conditions of the document r		d on Page 2 as heretofore changed, remains	unchanged and in fu	III force and effect.	
15A. NAME AND TITLE OF SIGNER (Type or print)	,	16A. NAME AND TITLE OF	CONTRACTING OF	FICER (Type or print)	
David Pham, Project Engineer		Sandy Oliver	-Hall, Cor	ntracting O	fficer
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF A	AMERICA		16C. DATE SIGNED
(Signature of person authorized to sign)	- June 30, 2005	(Signature	e of Contracting Office	er)	June 30, 2005

NSN 7540-01-152-8070 10-83) PREVIOUS EDITION UNUSABLE

30-105-02

STANDARD FORM 30 (REV.

STANDARD FORM 30 PAGE 2 OF 2

SOLICITATION NO. W912PL-05-B0004

Amendment No. 1, Change Item: Plans and Specifications

2. REPLACE THE FOLLOWING DRAWINGS WITH THE FOLLOWING

- 2 REV 'A' INDEX TO CONTRACT DRAWINGS
- 9 REV 'A' CONTRACTOR STAGING AREA
- 11 REV 'A' LEVEE RIGHT-OF-WAY AND FENCING PLAN

- SD-17 REV 'A' LEVEL RIGHI-OF-WAY AND FENCING PLAN
 SD-17 REV 'A' 113TH AVENUE CIC SIDEDRAIN PLAN, PROFILE AND DETAILS
 SD-18 REV 'A' 111TH AVENUE CIC SIDEDRAIN PLAN, PROFILE AND DETAILS
 SD-19 REV 'A' 109TH AVENUE CIC SIDEDRAIN PLAN, PROFILE AND DETAILS
 SD-20 REV 'A' EAST 107TH AVENUE CIC SIDEDRAIN PLAN, PROFILE AND DETAILS
 SD-21 REV 'A' WAST 107TH AVENUE CIC SIDEDRAIN PLAN, PROFILE AND DETAILS
 SD-22 REV 'A' 105TH AVENUE CIC SIDEDRAIN PLAN, PROFILE AND DETAILS
- GD-21 REV 'A' 95th AVENUE DIKE PLAN, PROFILE AND SECTIONS

					T
SOLICITATION, OFFER,	1. SOLICITATION NO.		SOLICITATION	3. DATE ISSUED	PAGE OF PAGES
AND AWARD	W912PL-05-B-0004	SEAL	ED BID (IFB)	10 77 77 0005	
(Construction, Alteration, or Repair)		NEGO	DTIATED (RFP)	13 JUNE 2005	
IMPORTANT - The "offer" section on the reverse must be t					
4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST N W81EYN-0046-0004).	6. PROJECT	NO.	
CODE CODE	8.	ADDRESS OFFER TO	1		
USAED - L.A. P.O. BOX 532711, CESPLCT-E LOS ANGELES, CA 9005302325 ATTN: SANDY HALL		SEE IT	E M 7		
9. FOR INFORMATION CALL A. NAME SANDY HALL		B. TELEPHON		de) (NO COLLECT CALLS) 213) 452-3243	
	SOLICITA	TION			
NOTE: In sealed bid solicitations "offer" and "offeror	" mean "bid" and "bidder".				
10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRI TRES RIOS ENVIRONMENTAL RESTOR ARIZONA.	BED IN THESE DOCUMENTS (Title, identical ident	fying no., date): ROL NORTH	I LEVEE - PHA	ASE 1A, MARICOPA	COUNTY,
THIS PROJECT CONSISTS OF construction protection including 3" aggregate base cours trapezoidal reinforced concree channel, reinforced connections, guide dikes, four-wire rigiconsists of excavation, compacted fill and di	te operation and maintenant forced concrete box culver wht-of-way fence and gates	ce roads, inv ts, grouted s . removal an	vert access rampa tone, a 14-acre to d disposal of del	s, an approximate 1.3 feet catch basin, agric bris and incdicentals.	3 mile of cultural side
THE ESTIMATED COST OF THIS ACQU	ISITION IS BETWEEN	1,000,000 A	.ND \$5,000,000	.00.	
NOTE: Bidders must be registered with the Government Contract Award.	Central Contractor Regis	ration (CCR) at Http://www	.ccr.gov in order to	receive a
THE PROCUREMENT MAY BE DELAYSE EVALUATION AND/OR FINAL AWARD	ED, CANCELLED, OR R PROCESS.	EVISED AT	ANY TIME D	URING SOLICITAT	ION,
				•	
11, The Contractor shall begin performance within 10	calendar days and complete it with	n 375	calendar days afte	er receiving	
award, notice to proceed. This performance	period is m	andatory,	negotiable. (Sas	SECTION 00800	J
2A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE (If "YES," indicate within how may calendar days after a	AND PAYMENT BONDS?			12B. CALENDAR DAYS	
X YES NO	rura in som sam,			10	
3. ADDITIONAL SOLICITATION REQUIREMENTS:					
· · · · · · · · · · · · · · · · · · ·	work required are due at the place spe id solicitation, offers will be publicly op id address, the solicitation number, and	ned at that time.	Sealed envelopes	(<i>hour)</i> local time	
C. All offers are subject to the (1) work requirements, and (2) oth reference.	ner provisions and clauses incorporated	in the solicitation in	full text or by		
D. Offers providing less than 90 calendar days f	or Government acceptance after the da	te offers are due w	ill not be considered and	i	

NSN 7540-01-155-3212

++DDMORDA ATTEMAT

	OFFER (Must be fully completed by offeror)								
14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)				15. TELEPHONE NO. (Include area code) FAX NO.:					
				16. REMITTANCE ADDRESS (Include only if different than Item 14)					
CAGE CODE:		DUNS NO.:							
CODE	FACILITY			1 (41)		:			
by the Government in writ	ting within	red at the prices specified belo calendar days after th usert any number means t	e date offers are due. <i>(Inser</i>	rt any number eq	ial to or greater	is accepted than the minimun	ı require-		
AMOUNTS	SEE S	ECTION 00010, 1	BID SCHEDULE	:	,				
18. The offeror agrees to	furnish any requ	uired performance and p	ayment bonds.						
	(The offe	eror acknowledges r	19. ACKNOWLEDG	MENT OF AMEI nts to the soli	IDMENTS citation - give	number and	date of each)		
ANATHONATHT NO					T			. 1	
AMENDMENT NO.						ļ			
DATE									
20A. NAME AND TITLE OF PERS (Type or print)	ON AUTHORIZED TO	O SIGN OFFER		20B. SIGNATURI				20C. OFFER DATI	i
			AWARD (To be co	mpleted by Gov	ernment/				
21. ITEMS ACCEPTED:			23. ACCOUNT	ING AND APPROP	RIATION DATA				
24. SUBMIT INVOICES TO ADDR.	ESS SHOWN IN		ITEM	25. OTHER THAN	FULL AND OPEN C	OMPETITION PURSU	IANT TO		
(4 Copies unless otherwise specified)			10 U.S.	2304(c) ()		11 U.S.C 253(c) ()		
28. ADMINISTERED BT				27. PAYMENT WILL BE MADE BY					
		CONTRACT	ING OFFICER WILL COI	MPLETE ITEM 2	8 OR 29 AS AP	PLICABLE			
28. NEGOTIATED AGREEMENT Contractor is required to sign this document and return		29. AWARD (Contractor is not required to sign this document.) Your offer on this solicitation is hereby accepted as to the items listed. This award con-summates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.							
30A. NAME AND TITLE OF CONT TO SIGN (Type or prin.	RACTOR OR PERSO	N AUTHORIZED		31A. NAME OF CONTRACTING OFFICER (Type or print)					
30B. SIGNATURE	DB. SIGNATURE 30C. DATE 31B. UNITED STATES OF AMERICA BY				31G. AV	VARD DATE			

SECTION 00100 INSTRUCTIONS TO BIDDERS

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*DENOTES CHANGE

Section 00100 - Bidding Schedule/Instructions to Bidders

52.0000-4010 INQUIRIES

Perspective bidders/offerors should submit inquiries related to this solicitation by writing or calling the following (collect calls will not be accepted:

(1) For inquiries of a contractual nature (solicitation requirements, interpretation of contractual language) call: Sandy Hall (213) 452-3243
For bid results only, call (213) 452-3235.

(2) All technical questions on the specification or drawings will be submitted in writing to: Address:

USAED - L.A.

ATTN: David Pham (213) 452-3648

FAX QUESTIONS TO: SANDY HALL (213) 452-4184

- (3) Please include the solicitation number, project title and location of project with your questions. Written inquiries must be received by this office not later than 14 calendar days prior to bid opening date/date set for receipt of offers.
- (4) Oral explanations or instructions are not binding. Any information given to a bidder/offeror which impacts the bid/offer will be given in the form of a written amendment to the solicitation.

52.0000-4023 SAFETY REQUIREMENTS

The bidder's attention is directed to the latest version of U.S. Army Corps of Engineers Safety and Health Manual, EM 385-1-1, which will be strictly enforced. This publication may be obtained from the US Army Engineer District, Los Angeles, ATTN: Safety Office, P.O. Box 532711, Los Angeles, California 90053-2325.

52.209-4501 CONTRACTOR REPONSIBILITY, PRE-AWARD SURVEY

In order to determine a contractor's responsibility for purposes of contract award in accordance with FAR Part 9, a statement regarding previous experience in performing comparable work, and/or plant to be used in performing the work is required. After the bid opening, the Government will request this information and set a due date for its submission.

00100-2

52.211-2 AVAILABILITY OF SPECIFICATIONS LISTED IN THE DOD INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) AND DESCRIPTIONS LISTED IN THE ACQUISITION MANAGEMENT SYSTEMS AND DATA REQUIREMENTS CONTROL LIST, DOD 5010.12-L (DEC 2003)

Copies of specifications, standards, and data item descriptions cited in this solicitation may be obtained--

- (a) From the ASSIST database via the Internet at http://assist.daps.dla.mil; or
- (b) By submitting a request to the--Department of Defense Single Stock Point (DoDSSP), Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2179, Facsimile (215) 697-1462.

(End of provision)

52.214-3 AMENDMENTS TO INVITATIONS FOR BIDS (DEC 1989)

- (a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.
- (b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date in the space provided for this purpose on the form for submitting a bid, (3) by letter or telegram, or (4) by facsimile, if facsimile bids are authorized in the solicitation. The Government must receive the acknowledgment by the time and at the place specified for receipt of bids.

(End of provision)

52.214-4 FALSE STATEMENTS IN BIDS (APR 1984)

Bidders must provide full, accurate, and complete information as required by this solicitation and its attachments. The penalty for making false statements in bids is prescribed in 18 U.S.C. 1001.

(End of provision)

52.214-5 SUBMISSION OF BIDS (MAR 1997)

- (a) Bids and bid modifications shall be submitted in sealed envelopes or packages (unless submitted by electronic means) (1) addressed to the office specified in the solicitation, and (2) showing the time and date specified for receipt, the solicitation number, and the name and address of the bidder.
- (b) Bidders using commercial carrier services shall ensure that the bid is addressed and marked on the outermost envelope or wrapper as prescribed in subparagraphs (a)(1) and (2) of this provision when

00100-3

delivered to the office specified in the solicitation.

- (c) Telegraphic bids will not be considered unless authorized by the solicitation; however, bids may be modified or withdrawn by written or telegraphic notice.
- (d) Facsimile bids, modifications, or withdrawals, will not be considered unless authorized by the solicitation.
- (e) Bids submitted by electronic commerce shall be considered only if the electronic commerce method was specifically stipulated or permitted by the solicitation.

(End of provision)

52.214-6 EXPLANATION TO PROSPECTIVE BIDDERS (APR 1984)

Any prospective bidder desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon enough to allow a reply to reach all prospective bidders before the submission of their bids. Oral explanations or instructions given before the award of a contract will not be binding. Any information given a prospective bidder concerning a solicitation will be furnished promptly to all other prospective bidders as an amendment to the solicitation, if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective bidders.

(End of provision)

52.214-7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS (NOV 1999)

- (a) Bidders are responsible for submitting bids, and any modifications or withdrawals, so as to reach the Government office designated in the invitation for bids (IFB) by the time specified in the IFB. If no time is specified in the IFB, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that bids are due.
- (b)(1) Any bid, modification, or withdrawal received at the Government office designated in the IFB after the exact time specified for receipt of bids is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late bid would not unduly delay the acquisition; and--
- (i) If it was transmitted through an electronic commerce method authorized by the IFB, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of bids; or
- (ii) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of bids and was under the Government's control prior to the time set for receipt of bids.
- (2) However, a late modification of an otherwise successful bid that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

- (c) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the bid wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
- (d) If an emergency or unanticipated event interrupts normal Government processes so that bids cannot be received at the Government office designated for receipt of bids by the exact time specified in the IFB and urgent Government requirements preclude amendment of the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.
- (e) Bids may be withdrawn by written notice received at any time before the exact time set for receipt of bids. If the IFB authorizes facsimile bids, bids may be withdrawn via facsimile received at any time before the exact time set for receipt of bids, subject to the conditions specified in the provision at 52.214-31, Facsimile Bids. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for receipt of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

(End of provision)

52.214-13 TELEGRAPHIC BIDS (APR 1984)

- (a) Bidders may submit telegraphic bids as responses to this solicitation. These responses must arrive at the place, and by the time, specified in the solicitation.
- (b) Telegraphic bids shall refer to this solicitation and include the items or subitems, quantities, unit prices, time and place of delivery, all representations and other information required by this solicitation, and a statement of agreement with all the terms, conditions, and provisions of the invitation for bids.
- (c) Telegraphic bids that fail to furnish required representations or information, or that reject any of the terms, conditions, and provisions of the solicitation, may be excluded from consideration.
- (d) Bidders must promptly sign and submit complete copies of the bids in confirmation of their telegraphic bids.
- (e) The term "telegraphic bids," as used in this provision, includes mailgrams.

(End of provision)

52.214-18 PREPARATION OF BIDS--CONSTRUCTION (APR 1984)

- (a) Bids must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a bid must initial each erasure or change appearing on any bid form.
- (b) The bid form may require bidders to submit bid prices for one or more items on various bases, including--
- (1) Lump sum bidding;

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- (2) Alternate prices;
- (3) Units of construction; or
- (4) Any combination of subparagraphs (1) through (3) above.
- (c) If the solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "no bid" in the space provided for any item on which no price is submitted.
- (d) Alternate bids will not be considered unless this solicitation authorizes their submission.

(End of provision)

52.214-19 CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION (AUG 1996)

- (a) The Government will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the Government, considering only price and the price-related factors specified elsewhere in the solicitation.
- (b) The Government may reject any or all bids, and waive informalities or minor irregularities in bids received.
- (c) The Government may accept any item or combination of items, unless doing so is precluded by a restrictive limitation in the solicitation or the bid.
- (d) The Government may reject a bid as nonresponsive if the prices bid are materially unbalanced between line items or subline items. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the Government even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.

(End of provison)

52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

Offers submitted in response to this solicitation shall be in the English language. Offers received in other than English shall be rejected.

(End of provision)

52.214-35 SUBMISSION OF OFFERS IN U.S. CURRENCY (APR 1991)

Offers submitted in response to this solicitation shall be in terms of U.S. dollars. Offers received in other than U.S. dollars shall be rejected.

(End of provision)

52.0214-4583 TELEGRAPHIC BIDS/OFFERS ARE NOT ACCEPTABLE

Any telegram to modify or withdraw a bid/offer sent to this office must be physically delivered to the office designated for receipt of bid/offer by the date and time set for bid opening/receipt of proposals. No one from this office will be dispatched to the local telegraph office to pick up any telegram for any reason.

52.0214-4599 EVALUATION FOR AWARD

The Government contemplates award of one contract to the responsive, responsible bidder who submits the low bid for the total of all the items in the Bidding Schedule.

52.214-5000 APPARENT CLERICAL MISTAKES (MAR 1995)--EFARS

- (a) For the purpose of initial evaluations of bids, the following will be utilized in the resolving arithmetic discrepancies found on the face of bidding schedule as submitted by the bidder:
 - (1) Obviously misplaced decimal points will be corrected;
 - (2) Discrepancy between unit price and extended price, the unit price will govern;
 - (3) Apparent errors in extension of unit prices will be corrected;
 - (4) Apparent errors in addition of lump-sum and extended prices will be corrected.
- (b) For the purpose of bid evaluation, the government will proceed on the assumption that the bidder intends his bid to be evaluated on basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.
- (c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.

(End of statement)

BIDS (APR 52.0214-5001 DIRECTIONS FOR SUBMITING 2002)

Envelopes containing bids must be sealed, marked and addressed as follows:

W912PL-05-B-0004

MARK ENVELOPES:

Bid under IFB No. W912PL-05-B-0004 *Bid Opening Date: 14 JULY 2005, 1:00 P.M.

ADDRESS ENVELOPES TO:

Department of the Army U. S. Army Engineer District, Los Angeles ATTN: Contracting Division C/O: SANDY HALL

P. O. Box 532711, CEPLSCT-E Los Angeles, CA 90053-2325

SPECIAL INSTRUCTIONS PERTAINING TO HAND-CARRIED BIDS:

Due to security precautions, all Corps of Engineers visitors/couriers are now required to check in at the Public Affairs Office (PAO), Suite 980, Wilshire Blvd, Los Angeles, CA. Bidders are no longer permitted to hand-carry their bids directly to Contacting Division without an authorized escort. **Bids may NOT be left unattended at the Public Affairs Office (PAO), Suite 980.**

Bidders who desire to hand-deliver their bids prior to the scheduled bid opening time/date must notify the Contracting Division to arrange for receipt of their bid by Contracting Division personnel. Normally the contact will be the Contract Specialist designated above. In the event the Contract Specialist cannot be reached, please call the main Contracting Division telephone number, 213-452-3231 or the following alternative telephone numbers -3233, -3245, -3234, or -3235, in order to request assistance.

30 minutes prior to the scheduled bid opening time/date, the Bid Opening Officer will be in the Public Affairs Office (PAO) Suite 980, to accept bids. After visitor in-processing, all bidders will subsequently be escorted to Bid Opening Room, where the bids will be publicly opened and read.

In order to expedite visitor processing, bidders are encouraged to complete the information requested on the Notice of Visitor(s) Form (attached). The completed form can be faxed to the Contract Specialist at (213)452-4184 or 4187, prior to the date for receipt of bids. In addition, no more than 2 visitors per firm will be permitted within the building. No exceptions will be made. The offeror is responsible for compliance with the security requirements and shall ensure that any company representative, courier or delivery personnel are aware of these special procedures pertaining to hand carried bids.

*DENOTES CHANGE

NOTICE OF VISITOR(S) 1. Date(s) of Visit (Inclusive) 2. Arrival Time 3. Name of Visitor(s) (Last, First) 4. Agency/Company of Visitor 5. Name of Person Being Visited 6. Suite Number 7. Telephone Number (Include Div, Br, Sec) 8. Contact Person (if other than Person Being Visited) 9. Telephone Number 10. Other Comments or Instructions - All visitors must report to the Public Affairs Office, Suite 980

- Visitors must use the Visitor Tag provided.
- Visitors must be escorted to Corps of Engineers floors
- Parking validation is only available for Engineering Division, Construction-Operations, and Information Management field personnel.
- Delivery personnel will be validated for 30 minutes only.

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a <u>FIRM FIXED PRICE</u> contract resulting from this solicitation.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (MAY 2004)

- (a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.
- (b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

Definitions. As used in this contract--

HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Service-disabled veteran-owned small business concern--

- (1) Means a small business concern--
- (i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
- (ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.
- (2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern means a small business concern that represents, as part of its offer that--

- (1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;
- (2) No material change in disadvantaged ownership and control has occurred since its certification;
- (3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and
- (4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Veteran-owned small business concern means a small business concern-

- (1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and
- (2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern--

- (1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (2) Whose management and daily business operations are controlled by one or more women.
- (d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(End of clause)

52.225-9 BUY AMERICAN ACT—CONSTRUCTION MATERIALS (JAN 2005)

(a) Definitions. As used in this clause--

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Domestic construction material means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

United States means the 50 States, the District of Columbia, and outlying areas.

- (b) Domestic preference. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.
- (2) This requirement does not apply to the construction material or components listed by the Government as follows: None.
- (3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that
- (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
- (ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.
- (c) Request for determination of inapplicability of the Buy American Act. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;
(B) Unit of measure:

- (C) Quantity;
- (D) Price;
- (E) Time of delivery or availability;

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- (F) Location of the construction project;
- (G) Name and address of the proposed supplier; and
- (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.
- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.
- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).
- (iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.
- (2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.
- (3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.
- (d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) \1\
Item 1			
Foreign construction material			•••••
Domestic construction material			
Item 2			
Foreign construction material			
Domestic construction material			

Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

52,225-10 NOTICE OF BUY AMERICAN ACT REQUIREMENT--CONSTRUCTION MATERIALS (MAY 2002)

- (a) Definitions. Construction material, domestic construction material, and foreign construction material, as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act -- Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).
- (b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.
- (c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.
- (2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.
- (d) Alternate offers.
- (1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.
- (2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.
- (3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested--
- (i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or
- (ii) May be accepted if revised during negotiations.

(End of provision)

52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids,

may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.-

(c)	The amount	of the bid guarantee shall be _	20%	percent of the bid price or
\$	3,000,000	, whichever is less		

- (d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.-
- (e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

(End of clause)

52.228-4506 INDIVIDUAL SURETIES IN SUPPORT OF BID BONDS

Bidder/offerors utilizing individual sureties in support of a bid bond shall include a Standard Form (SF) 28 (Affidavit of Individual Surety), accompanied by a pledge of acceptable assets from each person Bond), and the bid itself (see clause titled "Pledges of Assets," FAR 52.228-11).

Pledges of acceptable assets shall be in the form of (1) evidence of an escrow account and/or (2) a recorded lien on real estate. If this is an RFP, failure to provide required documentation described herein may cause the offeror to be deemed "unacceptable".

52,228-4507 BID GUARANTEE FORM AND AMOUNT

When bids/proposals exceed \$100,000, the offeror shall furnish a separated bid guarantee in accordance with the solicitation provision titled "Bid Guarantee", FAR 52.228-1. In accordance with FAR 28.101-2 the bid guarantee amount shall be a least 20 percent of the "bid price" but shall not exceed \$3 million. When the penal sum is expressed as a percentage, a maximum dollar limitation may be stated. If there are option line items on the Pricing Schedule (Schedule B), the term "bid price" is hereby defined as the total bid not to include any amount for line items designated as "options". In bids/proposals that contain "additives", the "bid price" is defined as the total of all bid items including additive line items. FAR 28.106-1 states that a Standard Form (SF) 24 shall be used for the bid bond. In accordance with FAR 28.202(a)(1), corporate sureties utilized must appear on the list contained in the Department of Treasury Circular 570 titled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies."

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995) – ALTERNATE I (FEB 1995)

- (a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.
- (b) An organized site visit has been scheduled for-28 JUNE 2005 AT 8:00 A.M.

(c) Participants will meet at-91ST WWTP ENTRANCE GATE P.O.C.: ROB CRIST, (623) 935-0820

(End of provision)

52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.
(b) The use in this solicitation of any (48 CFR Chapter) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation
(End of provision)
252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

- (a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.
- (b) Representation. The Offeror represents that it:
- ____(1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- ____ (2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- (c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)

*52.000-4515 SECURITY CONTRACT LANGUAGE FOR ALL CORPS OF ENGINEERS' UNCLASSIFIED CONTRACTS (APR 2004)

A. AUTOMATED INFORMATION SYSTEM (AIS) EFFORT

All Contractor employees (U.S. citizens and Non- U.S. citizens) working under this contract (to include grants, cooperative agreements and task orders) who require access to Automated Information Systems (AIS), (stand alone computers, network computers/systems, e-mail) shall, at a minimum, be designated into an ADP-III position (non-sensitive) in accordance with DoD 5220-22-R, Industrial Security Regulation. The investigative requirements for an ADP-III position are a favorable National Agency Check (NAC), SF-85P, Public Trust Position. The contractor shall have each applicable employee complete a SF-85P and submit to the Los Angeles District, ATTN: CESPL-P.O Box 532711, Los Angeles, California 90053 Security Officer within three (3) working days after award of any contract or task order, and shall be submitted prior to the individual being permitted access to an AIS. Contractors that have a commercial or government entity (CAGE) Code and Facility Security Clearance through the Defense Security Service shall process the NACs and forward visit requests/results of NAC to the Los Angeles District Security Officer. For those contractors that do not have a CAGE Code or Facility Security Clearance, the Los Angeles District Security Office will process the investigation in coordination with the Contractor and contract employees.

B. NATIONAL INFRASTRUCTURES EFFORTS

Contractor employees scheduled to access the Homeland Security determined National Infrastructures, i.e., Powerhouses, Switchyards, Locks/Dams or other restricted/sensitive areas are required to submit a State Bureau of Investigation Criminal Records (History) Check from the state where the work will be performed to the Contracting Officer no later than ten (10) working days after contract award. In addition to providing the individual Criminal Records (History) Check, contractor employees scheduled to have access to the National Infrastructures for six (6) months or longer required a favorable Public Trust Background Investigation (SF-85P), which includes fingerprints (FD-258). Contractor employees may have the finger print card (FD-258) completed by local law enforcement anyone qualified in the Los Angeles District Field Offices, or by making an appointment with the District Security Officer, Sergeant Major Jeffrey Koontz, (602) 640-2015, X289.

The contractor shall have each applicable employee provide the completed SF-85P and FD-258 to the Los Angeles Security Office as soon as possible after contract award, but definitely prior to the employee being permitted access to the work area.

C. FOREIGN NATIONALS

Contractor employees scheduled to access the Homeland Security determined National Infrastructures, i.e., Powerhouses, Switchyards, Locks/Dams or other restricted/sensitive areas are required to submit a State Bureau of Investigation Criminal Records (History

In accordance with Engineering Regulation, ER 380-1-18, Section 4, foreign nationals who work on Corps of Engineers' contracts or task orders shall be approved by the HQUSACE Foreign Disclosure Officer or higher before beginning work on the contract/task order. This regulation includes subcontractor employees. (NOTE: exceptions to the above requirement include foreign nationals who perform janitorial and/or ground maintenance services.) The contractor shall submit to the Division/District Contract Office, the names of all foreign nationals proposed for performance under this contract/task order, along with documentation to verify that he/she was legally admitted into the United States and has authority to work and/or go to school in the US. Such documentation may include a US passport, Certificate of US citizenship (INS Form N-560 or N-561), Certificate of Naturalization (INS Form N-550 or N-570), foreign passport with I-551 stamp or attached INS Form I-94 indicating employment authorization, Alien

*DENOTES CHANGE

Registration Receipt Card with photograph (INS Form I-151 or I-551), Temporary Resident Card (INS Form I-688), Employment Authorization Card (INS Form I-688A), Reentry Permit (INS Form I-327), Refugee Travel Document (INS Form I-571), Employment Authorization Document issued by the INS which contains a photograph (INS Form I-688B).

Classified contracts require the issuance of a DD Form 254 (Department of Defense Contract Security Classification Specification).

(End of Clause)

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SECTION 01200

GENERAL REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of the specification to the extent referenced. The publications are referenced in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

DEPARTMENT OF DEFENSE (DoD)

UFC 4-010-01 (2003) UNIFIED FACILITIES CRITERIA (UFC)

ASME INTERNATIONAL (ASME)

ASME B18.2.1 (1996) Square and Hex Bolts and Screws, Inch Series

ASME B18.2.2 (1987; R 1999) Square and Hex Nuts

ASTM INTERNATIONAL (ASTM)

ASTM F 547 (2001) Nails for Use with Wood and Wood-Base Materials

ASTM F 1667 (2002) Driven Fasteners: Nails, Spikes, and Staples

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

NIST PS 20 (1999) American Softwood Lumbar Standards

U.S. ARMY CORPS OF ENGINEERS (USACE)

COE EM 385-1-1 (1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

EM 1110-1-1003 (01 Aug 96) NAVSTAR Global Positioning System Survey

EM 1110-1-1005 (31 Aug 94) Topographic Surveying

U.S. DEPARTMENT OF COMMERCE (DOC)

DOC PS 1 (1995) Construction and Industrial Plywood

MASTER PAINTERS INSTITUTE (MPI)

MPI 5 (Jan 2003) Exterior Alkyd Wood Primer

MPI 10 (Jan 2003) Exterior Latex, Flat

1.2 PAYMENT

No separate payment will be made for the items covered under this section and all costs in connection with such work will be considered as a subsidiary obligation of the Contractor.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The "RE" designates that the Resident Office will review the submittal for the Government. Submit the following in accordance with Section 01330, SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Temporary Electrical Layout Plan; G, RE

Contractor's Work Area Plan; G, RE

Safety Plan; G, RE

Permits Acquired by Contractor

Contractor shall submit the above required documents in accordance with this section.

Haul Route Plan; G, RE.

The Contractor shall submit a haul route plan that will be used for during construction of the project.

1.4 TEMPORARY ELECTRIC WIRING

1.4.1 Temporary Power and Lighting

The Contractor shall provide construction power facilities in accordance with the safety requirements of the National Electrical Code NFPA No. 70 and the U.S. Army Corps of Engineers Safety and Health Requirements Manual COE EM 385-1-1. The Contractor, or his delegated subcontractor, shall enforce all the safety requirements of electrical extensions for the work of all subcontractors. All work shall be accomplished by skilled electrical tradesmen in a workmanlike manner, as approved by the Contracting Officer. Prior to construction the Contractor shall provide a Temporary Electrical Layout Plan.

1.4.2 Construction Equipment

In addition to the requirements of COE EM 385-1-1, The U.S. Army Corps of Engineers Safety and Health Requirements Manual, all temporary wiring conductors installed for operation of construction tools and equipment shall be either Type TW or THW contained in metal raceways, or may be multiconductor cord. Temporary wiring shall be secured above the ground or floor in a workmanlike manner and shall not present an obstacle to persons or equipment. Open wiring may only be used outside of buildings, and then only in strict accordance with the provisions of the National Electrical Code.

1.4.3 Circuit Protection

In addition to the present requirements in COE EM 385-1-1 and the National Electrical Code, all 15 and 20-ampere receptacle outlets used for obtaining power during construction shall have ground fault circuit interrupters (GFCI) for personnel protection. Block and brick saws shall also be equipped with GFCI. The Contracting Officer may allow an exception to this requirement for circuits for concrete vibrators or circuits operating at other than 60 Hertz normal (in both cases an assured grounding program as described in the National Electrical Code, except utilizing the daily inspection frequency of the grounding means of such equipment, may be permitted). The assured grounding program will not be permitted as a substitute for usage of GFCI'S except as described above. All generator-powered 15- and 20-ampere, 60 Hertz receptacle outlets shall have GFCI'S, and shall be properly grounded. A testing means shall be provided which will impose a measured fault of 5 milliamperes, plus or minus 1 milliamperes, and result in tripping the GFCI unit.

1.5 UTILITIES

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1.5.1 Cooperation with Utilities

An attempt has been made to determine the location of all underground and surface utilities, including cable lines, drainage pipes, irrigation canals and structures; however, it shall be the Contractor's responsibility to cooperate with the pertinent utility companies so that any obstructing utility installation(s) may be adjusted. The locations of the underground, surface and overhead utilities as shown on the Drawings are based on the best available information obtained from the Utility Inventory Report dated November 2003 and the USACE topographic map. The Contractor shall not assume that the given information represents an exact location of the line. No guarantee is made to the accuracy of the location shown on the Drawings. The Contractor shall determine for himself the exact location of all utilities. Should Contractor's operations result in damage to any utility the location of which has been brought to its attention, he shall assume full responsibility for such damage. There also exists the likelihood that other abandoned older and undocumented underground utility and irrigation lines exist within the project area. Contractor shall contact Arizona Blue Stake (telephone number 602-263-1100) a minimum of two (2) working days before beginning any underground work. In addition, Blue Stake notification(s) shall be maintained on a current basis. If the Contractor encounters, through Blue-Staking or other means, existing utilities within the project limits that are not shown on the project plans, he shall make known the presence of these utilities to the Contracting Officer.

The following phone numbers should put the Contractor in contact with the proper personnel:

Arizona Public Service Company (APS) Carol Hall 602-371-5688 Lois Winkler 602-371-6837 (primary contact) COX Walter Coombs 623-322-7288 (primary contact) 623-322-7050 Lin Morrow Bill Wight 623-322-7044 623-322-7220 Carri Mazon Salt River Project (SRP) Irrigation 602-236-4887 (primary contact) Steven Tanis 602-236-2977 (primary contact) Harold Biever 602-236-2962 Robert Maurer David Farnsworth 602-236-4958 City of Phoenix - 91st Avenue WWTP Charles Hernandez 602-495-7998 Buckeye Irrigation Co. 623-386-2196 Jackie Meck City of Goodyear 623-883-7961 (primary contact) Angie Tatum David Ramirez 623-882-7954 City of Tolleson (In plant WW Utilities Supervisor) David Tyler 623-936-3381 City of Phoenix Transportation Department

602-262-7580

Clare Fletcher 602-262-4168

City of Phoenix Water, Sewer, ROW and SD Rudy Ramirez 602-262-1846

Salt River Project (SRP) Power

Steve Leslie 602-236-0424 (primary contact)

Bruce Souder 602-236-0692

Martha Fleming 602-236-4486 (primary contact)

Cindy Scott 602-236-0684

Gila River Tellecom

Ken Raidy 520-796-8885

Rigby Water

(Ted) Fred Wilkinson 480-677-6004

Owest

John Nevlis 602-630-6891

City of Avondale

Chris Hamilton 623-478-3370

Southwest Gas

Heather Symons 602-484-5294 (primary contact)

Marcus Watanabe 602-484-5385

MCDOT

Kevin Atterbery 602-506-8792

St. Johns Irrigation Canal

Adrion Reichert

Palo Verde Nuclear Power Plant Garry Jean 623-393-1951 Sarianne Rittenhouse 623-393-5192

It shall be the responsibility of the Contractor to verify the location of all utilities prior to any construction activities in a particular area where such facilities may exist. All existing overhead and underground utilities shall be Protected-in-Place (P.I.P.) unless noted otherwise on the Drawings.

1.5.2 APS and SRP (Power lines and power poles)

Both APS and SRP maintain high voltage (230kV and 500kV) overhead electric transmission lines are in the vicinity of the Tres Rios Project. The lines are not within the construction limits. However, there are numerous SRP electric facilities (12KV) including power poles and power lines that exist within the construction limits. These power poles and power lines are identified as either protect-in-place or removed and relocated by others on the contract drawings. The Contractor shall use caution when working in the adjacent areas, to the sides and directly below the overhead electric transmission lines. Figure 4 attached at the end of this section illustrates the line clearance and working clearance distances during construction published by the U.S. Department of Labor Occupational Safety & Health Administration (OSHA). A table of line clearance distance parameters for various overhead power transmission facilities is shown in Table 4. The Contractor shall also adhere to the requirements of COE EM 385-1-1 when working within the vicinity of these overhead electric transmission lines.

At all times during construction, the Contractor shall also comply with all laws, ordinances, rules, regulations, and safety requirements, including but not limited to the National Electric Safety Code, and the Occupational Safety and Health Standards for General Industry and specific requirements of both SRP and APS when working in the vicinity of these high voltage lines.

1.5.3 Salt River Project Water Operations

All construction activities will occur within the Salt River and on the existing river north bank. The river is defined as the area between the North top of bank to South top of bank, including the stormwater outfalls in the river. Flows can occur at any time in the river, and nuisance flows are ever present in the river bottom. The Contractor must contact Salt River Project (SRP) Water Operations, Joe Rauch at 602-236-5461 or Dallas Reigle 602-236-2271 for information regarding SRP releases into the Salt River. The Contractor should also request that SRP includes the Contractor on a call list for anticipated releases into the river. Both the Flood Control District and the City of Phoenix are on the call list and could be used as an information resource for flow releases into the river by SRP. However, it remains the Contractor's responsibility to determine when flows will occur in the river and what impacts those flows will have on his equipment and his work. The Contracting Officer assumes no responsibility for notifying the Contractor of any anticipated flows, nor for any damages incurred by the Contractor to his equipment or to any of the Contractor's work as a result of any flows of water.

The Contractor shall provide the Contracting Officer at the pre-construction conference with his plan for managing flows.

The Contractor shall avoid all areas of standing or running water whenever possible in accordance with the Specification Section 01354 Environmental Protection for Civil Works, however it may be necessary to operate equipment, including vehicles in areas of water.

1.5.4 Existing Concrete Irrigation Cannal (CIC)

There exist agricultural tail water drains long the South 105th, South 107th, South 109th, South 111th and South 113th Avenues within the project area. The Contractor shall contact the CIC's owners two weeks in advance prior to demolish and replace the CICs to obtain operation schedule for these CICs. It is the Contractor's responsibility to ensure that interruptions of these CIC's operations should not take place during construction of the Collector Channel and resonstruction of the CIC's.

1.5.5 Existing Wells and Probes

Several groundwater monitor wells and methane gas probes may exist within the project area. The Contractor shall determine for himself the exact location of each of these wells and probes, and any other wells that may have been installed in the project area. The Contractor shall take the necessary precautions to protect in place these wells and probes. Any damage caused by the Contractor to these wells and/or probes shall be repaired by the Contractor to the satisfaction of the owner at no cost to the project.

1.6 GENERAL SAFETY REQUIREMENTS

1.6.1 General

The Corps of Engineers Safety and Health Requirements Manual, COE EM 385-1-1, (see Contract Clauses, Section 00700, ACCIDENT PREVENTION) and the Occupational Safety and Health Act (OSHA) Standards for Construction (Title 29, Code of Federal Regulations Part 1926 as revised from time to time); General Industry Standards (Title 29, Code of Federal Regulations Part 1910 as revised from time to time); and the National Fire Protection Association Codes are applicable to this contract. In case of conflict the most stringent requirement of the standards is applicable.

1.6.2 The Prime Contractor's Superintendent and Safety Officer

The Prime Contractor's Superintendent in coordination with its Safety Officer shall take an active role in enforcing the recommended safety requirements made by the Safety Officer and participate in safety conferences, hazard analysis, tool box meetings, walk-through inspections, correction of violations, etc., and including that of the subcontractor's work. The Prime Contractor's Safety Officer is responsible for enforcing the safety requirements and scheduling and attending meetings related to the safety of the construction crews as needed. The Safety Officer needs to be familliar with the Federal, State and Local Government environmenatl protection laws.

1.6.3 Additional Health and Safety Requirements

Additional project specific health and safety requirements are presented in Section 01354, ENVIRONMENTAL PROTECTION FOR CIVIL WORKS.

1.6.4 Violations

If recurring violations and/or gross violation indicate that the safety performance is unsatisfactory, corrective action shall be taken as directed, and at the discretion of the Contracting Officer the retention or some part thereof will be withheld from the progress payment until corrective action has been completed.

1.6.5 Elevated Work Areas

Workers in elevated work areas in excess of 6 feet above an adjoining surface require special safety attention. In addition to the provisions of EM 385-1-1, the following safety measures are required to be submitted to the Contracting Officer. Prior to commencement of work in elevated work areas, the Contractor shall submit Drawings depicting all provisions of his positive protection system including, but not limited to, all details of guard rails.

1.6.6 Fire Prevention

The Contractor shall coordinate with the Fire Department and the Contracting Officer prior to conducting any fire hazardous operation. Cutting or welding will be permitted only in areas that are or have been made fire safe. Where possible, all combustibles shall be located at least 35 feet horizontally from the work site. Where such location is impracticable, combustibles shall be protected with fire blankets and/or protective welding screens to prevent slag from running out of the work area.

1.6.7 Record keeping/Reporting Requirements

On all contract operations, the Prime Contractor shall be responsible for recording and reporting all accident exposure and experience incident work. (This includes exposure and experience of the prime Contractor and his/her sub-contractor(s)). As a minimum these records shall include exposure work-hours and a log of occupational injuries and OSHA Form 200 or state equivalent as prescribed by 29 CFR 1904.5 (Reference EM 385-1-1, 01.D.04).

1.6.8 Accident Reporting

In addition to the requirements for reporting accidents in accordance with EM 385-1-1, Section 1, the Prime Contractor will submit at the 50% point and 100% of project completion, a written summary of worker's compensation claims filed by workers on the project. The report will include all subcontractors. The main report covering the Prime Contractor claims will be certified as "correct and true" by the Contractor's compensation insurance carrier. The same certification will be required for subcontractor reports.

1.7 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

This provision specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the CONTRACT CLAUSE, Section 00700, entitled "DEFAULT (FIXED-PRICE CONSTRUCTION)". In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

- a. The weather experienced at the project site during the contract period must be found to be unusually severe as determined by the Contracting Officer, that is, more severe than the adverse weather anticipated for the project location during any given month. Severve weather shall include monsoon rain storms that prevent the normal prosecution of the work and/ or water running or standing in the Salt River that prevents the normal prosecution of the work.
- b. The unusually severe weather must actually cause a delay to the completion of the project as determined by the Contracting Officer. The delay must be beyond the control and without the fault or negligence of the Contractor.

Upon acknowledgement of the Notice to Proceed (NTP) and continuing throughout the contract, the Contractor will record on the daily Contractor Quality Control (CQC) report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled work day (ER 415-1-15, 31 OCT 89). The number of adverse weather days may include days impacted by the adverse weather, even if adverse weather occurred prior to the day recorded (as in flooding after a previous rain storm). The Contractor will be eligible for a Contract Modification / time extension equal to the number of Unusually Severe Weather days as approved by the Contracting Officer.

1.8 SUPERVISION BY THE CONTRACTOR

The following requirements, in addition to those contained in the Contract Clause entitled: SUPERINTENDENCE BY CONTRACTOR, shall be met by the Contractor. The site representative appointed by the Contractor and approved by the Contracting Officer shall, as a minimum, have the authority to negotiate and execute Supplemental Agreements having a value up to \$100,000.

1.9 WASTE AND SPOILED MATERIAL

Unless otherwise specified, waste material as defined in Section 01354, ENVIRONMENTAL PROTECTION FOR CIVIL WORKS, and spoiled material consisting of hazardous, construction debris and vegetation grubbing as well as satisfactory excavated natural material not utilized as part of the construction Excess shall be hauled and disposed of by the Contractor at a licensed off site sanitary landfill.

1.10 TEMPORARY DISPOSAL SITE

Temporary disposal site identified on the contract drawings as normal disposal site is located between 107th Avenue and 105th Avenue This normal disposal site is made available for use during the construction period. This site is only for temporary stockpiling of material used for the project. The Contractor has option not to use the temporary disposal sites or landfills if he/she can sell the material or if other ecologically and economically suitable sites are found.

1.11 SEWAGE DISPOSAL FOR TEMPORARY FACILITIES

A sewage disposal location is not available at the site for use under this contract. The contractor shall dispose sewage at an off-site licensed sewage disposal facility. Permission to use the off-site facility shall be obtained by the Contractor and any costs attendant thereto shall be borne by the Contractor.

1.12 INTERRUPTION OF EXISTING UTILITIES SERVICES

The Contractor shall perform the work under this contract with a minimum of outage time for all utilities. In some cases, the Contractor may be required to perform the work while the existing utility is in service. The existing utilities services may be interrupted only when approved by the Contracting Officer. When it is necessary to interrupt the existing utilities, the Contractor shall notify the Contracting Officer in writing at least 14 calendar days in advance of the time the Contractor desires the existing service to be interrupted. The interruption time shall be kept to a minimum. Depending upon the activities at the facility which require continuous service from the existing utility, an interruption may not be subject to schedule at the time desired by the Contractor. In such cases the interruption may have to be scheduled at a time of minimum requirement of demand for the utility. The amount of time requested by the Contractor for interruption of existing utility service shall be as approved by the Contracting Officer.

1.13 UTILITY OUTAGES

The Contractor shall schedule work requiring disruption of utility distribution systems, electrical power, gas, sewage, water, and telephone. Contractor shall schedule this work such that work starts and is completed with continuous effort. For the convenience of the Government, the Contractor shall conduct outages on weekends or during non-duty hours. With the permission of the Contracting Officer, the Contractor shall work overtime for outages and shall not disrupt Government operations.

1.13.1 Utility Outages and Road Cutting

The Contractor shall provide a written request for utility outages or road cutting to the Contracting Officer ten working days in advance for approval. All outages and road cutting shall be programmed to occur at the convenience of the Government.

1.14 PUBLIC UTILITY COMPANIES

Aizona Blue Stake laws govern digging clearance requirements for all public utilities such as COX, Qwest, City of Phoenix 91st Avenue WWTP, El Paso Natural Gas, US West, Southwest Gas, Salt River Project Power or Arizona Public Service. if there are public utilities in the area, the words "Blue Staking Required" will be written on the form.

1.15 COOPERATION BETWEEN CONTRACTORS

The Government or other Agencies, including but not limited to 91st Avenue WWTP contractors, may have construction activities underway within the vicinity of this project. The Contractor shall be aware of these possible Government and or other Agency construction activities and shall work cooperatively with the Government and or other Agency Contractors to minimize impacts to all projects.

1.16 TEMPORARY CONSTRUCTION FACILITIES

1.16.1 Site Plan

The Contractor shall prepare a Contractor's Work Area Plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor, the number of trailers to be used, avenues of ingress/egress to the fenced area and details of the fence installation. Any areas which may have to be graveled to prevent the tracking of mud shall also be identified. The Contractor shall also indicate if the use of a supplemental or other staging area is desired. Sheet 9 of the contract drawings

provides the proposed staging area of the contractor and stockpile site for the project. This staging and normal disposal site is located on the existing riverbank (high ground), south side of the proposed levee. The Contractor understands that the use of this staging and normal disposal site is solely at his own risk No compensation will be made to the Contractor for any damage to or loss of equipment due to flooding and vandalism. The Contractor shall be responsible for diversion and control of water per Specifications Section 02100 DIVERSION AND CONTROL OF WATER and security for the site.

1.16.2 Employee Parking

Contractor employees shall park privately owned vehicles in an area designated as the Contractor Staging Area. This area is considered to be within reasonable walking distance of the construction site.

1.17 AVAILABILITY AND USE OF UTILITY SERVICES

1.17.1 Payment for Utility Services

Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor.

1.17.2 Meters and Temporary Connections

The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall provide and maintain necessary temporary connections, distribution lines, and meter bases required to measure the amount of each utility used for the purpose of determining charges. The Contractor shall notify the Contracting Officer, in writing, 5 working days before final electrical connection is desired.

1.17.3 Construction Water

Construction water is available from City of Phoenix hydrants as follows:

- a. There are hydrants located within two miles of the river between 91st Avenue and Dysart Road that could be used for such purposes.
- b. The Contractor will obtain a permit from the City at the second floor of the City Hall Building. The Contractor should allow two weeks for the City installation of any necessary meter.
- c. A fee of \$500 will be charged for each hydrant and meter, some of this fee being refundable.
- d. The charge for the water is approximately \$1.37/100 cubic feet.
- e. The Contractor will contact the City for specific information regarding the use of City water and for all costs associated with its use.

The Contractor cannot use groundwater from dewatering activities or from within excavations for construction purposes including dust control. Surface water may be utilized for construction purposes if approved by the Contracting Officer.

1.17.4 Sanitary Facilities

Suitable sanitary facilities shall be provided and maintained by the Contractor.

1.17.5 Telephone

The Contractor shall make arrangements and pay all costs for telephone facilities desired.

1.18 BULLETIN BOARD, PROJECT SIGN, AND SAFETY SIGNS

The Contractor shall construct and/or erect the following project facilities as soon as possible and not less than 15 calendar days after notice to proceed.

1.18.1 Bulletin Board

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, and other information approved by the Contracting Officer. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Legible copies of the aforementioned data shall be displayed until work is completed. Upon completion of work the bulletin board shall be removed by and remain the property of the Contractor.

1.18.2 Project and Safety Signs

The requirements for the signs and their content shall be as shown on the provided drawings at the end of this section. The signs shall be located at the project site and on the locations designated by the Contracting Officer, in a conspicuous place easily accessible to all employees and public as approved by the Contracting Officer. The signs shall be erected within 15 days after receipt of the notice to proceed. The data required by the safety sign shall be corrected daily, with light colored metallic or non-metallic numerals. Upon completion of the project, the signs shall be removed from the site.

1.18.2.1 Project Information Signs

Contractor shall provide and two (2) project information signs, at locations to be determined by the Contracting Officer, at the start of construction to inform the public of the forthcoming project and construction dates. Signs shall be constructed in accordance with the Project Sign Information Figures 1 and 2 included at the end of this section to be provided to the Contractor at the pre-construction meeting. The signs shall be installed at the location(s) approved by the Contracting Officer. The Contractor shall maintain the signs as necessary, and update the information as requested by the Contracting Officer.

1.18.2.2 Warning Signs

Contractor shall provide and install warning signs facing approaching traffic on all roads crossing under overhead power lines. Contractor shall also supply warning signs at sand and gravel operations cross traffic at locations shown on the Drawings or directed by the Contracting Officer.

1.18.2.3 Hard Hat Signs

Contractor shall provide and install six hard hat signs as shown in the Hard Hat Sign figure at the end of this section, at locations directed by the Contracting Officer.

1.19 PROTECTION AND MAINTENANCE OF TRAFFIC

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the State and local authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall implement appropriate traffic control measures to minimize traffic disruption during construction. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations. All damaged roadways will be repaired by the Contractor after construction activities are completed. Damaged roadways will also be repaired by the Contractor during construction if the damage could adversely affect non-construction traffic circulation, volume, and safety. Finished repair roadways shall be inspected and approved by the Government and its appropriate agencies including Arizona Department of Transportation (ADOT), Flood Control District of Maricopa County (FCDMC) and the City of Phoenix (COP). If it is determined that damaged roadways are not properly repaired, the Contractor shall be responsible for performing repairs of damaged roadways till they are accepted.

1.19.1 Haul Roads

Wherever possible the Contractor shall use existing dirt roads and gravel surfaced-roads. The Contractor shall, at its own expense, construct access and haul roads necessary for proper prosecution of the work under this contract. Haul roads shall be constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided. The Contractor shall provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, shall be adequate to ensure safe operation at all times. Dust control shall be compliant with Section 01354, ENVIRONMENTAL PROTECTION FOR CIVIL WORKS. Location, grade, width, and alignment of construction and hauling roads shall be submitted on Haul Route Plan and subject to approval by the Contracting Officer. Lighting shall be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations. Upon completion of the work, haul roads unless approved to remain by the Contracting Officer shall be removed.

1.19.2 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

1.19.3 Contractor Access

Contractor access to the river bottom is available at the locations using City of Phoenix rights-of-way and project rights-of-way as shown on the drawings. The Contractor shall coordinate use of the access points with the City Of Phoenix, other Contractors, and other Agencies as well as the Contracting Officer. For access using private property, the Contractor must obtain prior written approval of the property owner for such access use and submit a copy of the approval to the Contracting Officer prior to use of the property and/or ramps. Any damage to the property and/or ramps, caused by the Contractor's use, shall be repaired by the Contractor at no cost to the project.

1.20 PROTECTION OF EXISTING WORK

Before beginning any cutting or removal of the existing work, the Contractor shall carefully survey the existing work and examine the drawings and specifications to determine the extent of the work. The Contractor shall take all necessary precautions to insure against damage to such work to remain in place or to be reused, and any damage to such work shall be repaired or replaced as approved by the Contracting Officer at no additional cost to the Government. The Contractor shall carefully coordinate the work of this section with all other work.

1.21 REMOVAL AND INSTALLATION OF BENCH MARKS/MONUMENT

The Contractor shall locate and carefully remove all existing bench marks/monument that are situated on top of the existing Holly Acres Levee. These bench marks/monument shall be reinstalled when modifications to the existing Holly Acres Levee is completed. The Contractor should be aware that approval to modify and install any markers/ monument, shall be contingent upon the reestablishment and resetting as well as establishment and setting of the markers/monument by an Arizona registered Professional Land Surveyor in according with Flood Control District of Maricopa County or other appropriate standards. Before removal of the existing markers/monument, the Contractor shall notify the contracting Officer, in writing, 7 days in advance of the time he proposes to remove the markers/monument. Installation of bench marks/monument along the newly constructed levee is required at every 1000 linear feet along the levee.

1.22 CONTRACTOR'S TEMPORARY FACILITIES

1.22.1 Administrative Field Offices

The Contractor shall provide and maintain administrative field office facilities within the construction area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

1.22.2 Storage Area

The Contractor shall construct a temporary 6-foot high chain link fence around trailers and materials. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Trailers, materials or equipment shall not be placed or stored outside the fenced area unless such trailers, materials or equipment are assigned a separate and distinct storage area by the Contracting Officer away from the vicinity of the construction site. Materials shall not be open to public view with the exception of those items which are in support of ongoing work on any given day. Materials shall not be stockpiled outside the fence in preparation for the next day's work. The Contractor has option to park his/her mobile equipment including tractors, wheeled lifting equipment, cranes, trucks, and light equipment within the fenced area or within the project limits (right-of-way) at the end of each work day. The Contractor shall be responsible for the security of any material or equipment stored in the fenced area as well as its own mobile equipment parking within the fenced area or within the project limits.

1.22.3 Contractor's Work Area

The Contractor may establish a Contractor's Work Area (CWA) upon Contracting Officer's approval. The Contractor understands that his use of the river bottom for a CWA is solely at his own risk. No compensation will be made to the Contractor for any damage to or loss of equipment caused by the Contractor's establishment of a CWA in the river bottom.

- a. The CWA must cover the least amount of acreage possible to accomplish the tasks required for the material storage and servicing of equipment.
- b. Contractor shall not damage native plants or trees to establish CWA. The CWA shall not be located in the Low Flow Channel.
- c. The Contractor will monitor on a daily basis all activities in the CWA that may result in the leakage of oils, fluids, fuels, etc. which may contaminate soils in the river bottom, and promptly report any suspected leaks to the Contracting Officer.
- d. The Contractor will remove or clean up to background concentrations, and in accordance with applicable regulations test and properly dispose of all such contaminated soils resulting from the Contractors activities within the CWA and the river bottom on at least a biweekly basis, or more frequently at the direction of the Contracting Officer. The Contractor shall provide all necessary documentation to the Contracting Officer, including at a minimum the location, quantity, test results, and documentation of disposal of any such contaminated soils within one month after removal. At the discretion of the Contracting Officer, the Contractor may be required to provide a cleanup plan for approval prior to addressing such contaminated soils.
- e. The Contractor must create low diversion berms to direct surface flows away from the CWA so as to minimize the transport of contaminated soils downstream.
- f. The Contractor must coordinate with other Contractors performing work in the area such that there is no interference from these other Contractors with this project.

The Contractor may temporarily stockpile satisfactory materials in the river bottom upon Contracting Officer's approval. However the following criteria will be applied to the stockpiles:

- a. The stockpiles can be no more than 100 feet wide at the base.
- b. The long axis of the stockpiles must be oriented parallel to the direction of flow in the river.
- c. Any remnant materials remaining from the stockpiles after completion of the project must be completely removed from the river bottom.
- d. Waste materials shall become the property of the Contractor and shall be handled in accordance with this section and Section 01354 and shall be addressed in the Environmental Protection Plan.

The Contractor shall obtain approval of the Contracting Officer when using property outside the project limits of the river to park and service equipment and store materials for use. The Contractor will obtain prior written approval of the property owner for such use and submit a copy of the approval to the Contracting Officer prior to use of the property.

The Contractor must provide the Government field office construction trailer area outside of the river bottom at locations shown on the Drawings.

The Contractor shall grade all construction yards, easements and limits of construction which are disturbed by construction or construction related activities. Submission of final finished grading plans of the Contractor work area shall be submitted for appproval by the Contracting Officer or as a minimum, to a condition similar to or better than the pre-existing condition.

1.22.4 Appearance of Trailers

Trailers utilized by the Contractor for administrative or material storage purposes shall present a clean and neat exterior appearance and shall be in a state of good repair. Trailers which, in the opinion of the Contracting Officer, require exterior painting or maintenance will not be allowed on the property.

1.22.5 Maintenance of Storage Area

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse, with construction equipment or other vehicles, grassed or unpaved areas which are established roadways, shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved roadways; gravel gradation shall be at the Contractor's discretion. Grass located within the boundaries of the construction site shall be mowed for the duration of the project. Grass and

vegetation along fences and under trailers, and in areas not accessible to mowers shall be edged or trimmed neatly.

1.22.6 Security Provisions

Adequate outside security lighting shall be provided at the Contractor's temporary facilities. The Contractor shall be responsible for the security of its own equipment; in addition, the Contractor shall notify the appropriate law enforcement agency requesting periodic security checks of the temporary project field office. Additionally any contacts with local law enforcement shall be reported to.

SGM Jeffrey Koontz, Chief Security and Law Enforcement
Los Angeles District, U.S. Army Corps of Engineers

1.23 GOVERNMENT FIELD OFFICE

(602)640-2015. Ext.289.

1.23.1 Resident Engineer's Office

The Contractor shall provide for the exclusive use of the Government Project Engineer with a double wide trailer, 8-foot eave height, located where directed. The building shall have four 10' by 10' separated rooms and a conference room. Building layout will be submitted for approval by COR. The facility shall be equipped with portable water, chilled drinking water, electric power, adequate lighting, air conditioning and heating equipment, and combination male/female toilet facility with locking door. Connections to water and sewer mains shall be provided. Locks, keyed alike, shall be provided for all exterior doors. Six telephone sets with 9 lines shall be provided (2 voice, 1 fax and six data). A T.1 service line is also required. A small slot in the door or a lockable mail box mounted on the surface of the door shall be provided.

It shall be provided with a work table with stool, desk with chair, two additional chairs, and one legal size file cabinet that can be locked. The office shall be weatherproof and waterproof, shall have a minimum of two doors, a telephone, a battery operated smoke detector alarm, a sufficient number of adjustable windows for adequate light and ventilation, and a supply of approved drinking water. The windows and doors shall be screened and the doors provided with dead bolt type locking devices or a padlock and heavy duty hasp bolted to the door. Door hinge pins shall be non-removable. The windows shall be arranged to open and to be securely fastened from the inside. Glass panels in windows shall be protected by bars or heavy mesh screens to prevent easy access to the building through these panels. In warm weather, air conditioning capable of maintaining the office at 50 percent relative humidity and a room temperature 20 degrees F below the outside temperature when the outside temperature is 95 degrees F, shall be furnished. A mail slot in the door or a lockable mail box mounted on the surface of the door shall be provided. The temporary Government field office shall be maintained by the Contractor during the life of the contract including janitorial service twice a week and upon completion and acceptance of the work shall become the property of the Contractor and shall be removed from the site. Utilities shall be connected and disconnected in accordance with local codes and to the satisfaction of the Contracting Officer. Adequate outside exterior lighting shall be provided.

1.23.2 Parking

Open parking space for 18 vehicles shall be located convenient to the office. The combined parking and building area shall be enclosed with a woven wire fence approximately 6 feet high with outward facing top mount three-stand wire (razor or concertina variety) for no climb exterior intrusion protection with a 10-foot wide lockable gate accessible at all times from a road or street. At the completion of the project, the office shall be remain the property of the Contractor and shall be remove from the site. Utilities shall be disconnected in accordance with local codes and to satisfaction of the Contracting Officer.

Facilities, furnishings, materials, and equipment need not be new provided they are adequate for the intended use. All charges for utilities service for the office shall be borne by the Contractor, including long distance charges up to a maximum of \$75.00 per month. Minimum standoff distances (per UFC 4-010-01 October 8th, 2003) from perimeter facing to occupied structure will be 148 feet. Additionally, parking spaces will be a minimum of 82 feet from occupied structures.

1.23.3 Office Equipment

Contractor will provide janitorial service and the following office items: Fax/Copy/Telephone Answering Machine Brother MFC 7160c Multi-Function Center, or approved equal.

Copy Machine One Xerox 5830 copy machine with automatic document feeder, two-sided copy, and 11-inch by 17-inch paper, or approved equal, to be retained until final payment.

Approval of Office Equipment. Approval of the adequacy of the office equipment shall be obtained from the Contracting Officer or his representative prior to installation.

Maintenance and Removal. The office equipment shall be serviced and maintained in good condition by the Contractor during the life of this contract. After receipt of final payment, all office equipment shall be removed from the site by the Contractor, unless other specified.

1.23.4 Trailer-Type Mobile Office

The Contractor may, at its option, furnish and maintain a trailer-type mobile office acceptable to the Contracting Officer and providing as a minimum the facilities specified above. The trailer shall be securely anchored to the ground at all four corners to guard against movement during high winds.

1.24 WORK SITE COMMUNICATION

Whenever the Contractor has the individual elements of its work site so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

1.25 SAETY BARRICADES

As soon as practicable, but not later than 15 days after the date established for commencement of work, the Contractor shall furnish and erect temporary project safety fencing at the work site. The safety fencing shall be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 42 inches high, supported and tightly secured to steel posts located on maximum 10 foot centers, constructed at the approved location. The safety fencing shall be maintained by the Contractor

during the life of the contract and, upon completion and acceptance of the work, shall become the property of the Contractor and shall be removed from the work site.

1.26 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any gravel, dirt or mud which is tracked onto paved or surfaced roadways shall be removed and cleaned away. Materials resulting from demolition activities which are salvageable shall be stored within the fenced area described above or at the supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored.

1.27 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of trailers, materials, and equipment from within the fenced area, the fence shall be removed and will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition as determined by the Contracting Officer. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including top soil and seeding as necessary.

PART 2 PRODUCTS

2.1 CONSTRUCTION SIGNS

2.1.1 Materials

2.1.1.1 Lumber

Lumber shall conform to NIST PS 20, and shall be seasoned Douglas Fir, S4S, Grade D or better except that posts, braces and spacers shall be construction grade (WCLB).

2.1.1.2 Plywood

Plywood shall conform to DOC PS 1, Grade A-C, Group 1, exterior type.

2.1.1.3 Bolts, Nuts and Nails

Bolts shall conform to ASME B18.2.1, nuts shall conform to ASME B18.2.2, and nails shall conform to ASTM F 547and ASTM F 1667.

2.1.1.4 Paints and Oils

Paints shall conform to MPI 5 for primer and MPI 10 for finish paint and lettering.

PART 3 EXECUTION

3.1 PERMITS

Permits are required for the completion of this project. The Government will be obtaining several of the permits. The Contractor shall be responsible for obtaining all of the remainder of the permits.

3.1.1 Permits Acquired by Contractor

Reference is made to the article of the contract entitled "Permits and Responsibilities" which obligates the Contractor to obtain all required licenses and permits. These permits include those issued by the City of Phoenix, Maricopa County Flood Control District and Department of Transportation, the State of Arizona, and Federal agencies. Contractor shall pay all charges, fees, and taxes and provide all notices necessary and incidental to the due and lawful prosecution of the work.

Contractor shall be responsible for obtaining Right-of-Way Permit from the Flood Control District of Maricopa County (District) for all construction activities within District right-of-way. The Contractor shall further be responsible for providing any insurance and/or Performance Bonds the District may require and fulfilling all stipulations in the District's permit. The District will issue its permit at no cost to the Contractor if the permit is obtained prior to commencement of construction activities within the District's right-of-way. If construction begins prior to obtaining the District's permit, the District shall access an After-the-Fact Permit Fee of \$1,500.00. The Contractor may contact Shelby Brown of the District's Staff at (602) 506-4583 to make the necessary arrangements for obtaining the permit.

Copies of permits shall be provided to the Contracting Officer. Permits, Drawings, and notices required of the Contractor may include but not be limited to the following, and the Contractor shall comply with any and all provisions of such permits that are applicable to the activities carried out under this Project:

- a. City of Phoenix
 - 1. Hauling Permit (grading and drainage)
 - 2. Land Use / Stockpile Permit
 - 3. Construction Permit
 - 4. Concrete and Paving Permit
- b. Maricopa County Flood Control District
 - 1. Waste Tire Disposal Permit
 - 2. Refuse Hauling Permit
 - 3. Earth Moving Permit and overall compliance with requirements of Rule 310 (additional requirements for soil stabilization, etc.)
 - 4. Dust Control Plan

$\ensuremath{\mathtt{c}}\xspace$. Maricopa County Department of Transportation

1. East 115th and West 113th Aveunue guide dikes and dike construction limits.

- d. Arizona Department of Agriculture
 - 1. Arizona Protected Native Plants and Wood Removal Permit for protected plants taken from project site
 - 2. Notice of Intent to Clear Land
- e. Structural Pest Control Commission
 - 1. Certified Applicator. The following categories may apply: General Pesticide, Stagnant Water, Weed Control, Aquatic, Right-of-Way, Public Health, Turf Ornamental.
- f. Arizona Department of Environmental Quality
 - 1. AZPDES Stormwater Construction General Permit Notice of Intent and Storm Water Pollution Prevention Plan.
 - 2. AZPDES Stormwater Construction General Permit Notice of Termination.
 - 3. Stormwater Pollution Prevention Plan for Construction Activities
 - 4. NPDES Hydrostatic Test Water Discharge General Permit (Waiver).
 - 5. Compliance with City of Phoenix NPDES Permit provisions and Best Management Practices (BMPs)
 - BMPs relate to General Housekeeping, Pesticide/Herbicide/Fertilizer Application, Erosion and Sedimentation, and Discharge from Production Wells.

3.1.2 Permits To Be Acquired by the Government

The Government will be responsible for obtaining the following permits that may regulate activities carried out for this Project, and the Contractor shall comply with any and all provisions of such permits that are applicable to the activities carried out under this Project:

- a. State Historic Preservation Office
 - 1. Archaeological Clearance.
- b. US Army Corps of Engineers
 - 1. Congressionally authorized waiver from 404 permitting via CWA 404(r), and pursuant to an Environmental Impact Statement prepared in compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.)

3.1.3 Compliance by the Government

The Government will be responsible for compliance with all laws and regulations that may regulate activities carried out for this Project, and the Contractor shall comply with any and all provisions of such permits that are applicable to the activities carried out under this Project including but not limited to:

- a. Arizona Department of Environmental Quality
 - 1. Adherence to AZPDES Permit and associated Best Management Practices.
- b. State Historic Preservation Office
 - 1. Archaeological Clearance.
- c. US Army Corps of Engineers
 - 1. Congressionally authorized waiver from 404 permitting via CWA 404(r), and pursuant to an Environmental Impact Statement prepared in compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.)
- d. US Fish and Wildlife Service
 - 1. Threatened & Endangered Species and Migratory Bird Treaty Act compliance.

3.2 WORKING HOURS

The Contractor shall restrict all construction activities to the following schedule:

Monday thru Friday 6:30 a.m. to 7 p.m. Saturday 8:00 a.m. to 7 p.m.

No work will be permitted during any other hours or on Sundays or Federal Holidays without prior written approval from the Contracting Officer.

Disposal areas and haul routes utilized by the Contractor may require restricted hauling hours.

3.3 USE OF EXPLOSIVES

Because of the proximity to residential and commercial areas as well as major utilities, the use of explosives will NOT be permitted for any construction activities on the project.

3.4 PROTECTION AND RESTORATION OF PROPERTY

The Contractor shall protect-in-place all existing structures, utilities and other features as identified on the Drawings or directed, including but not limited to existing concrete irrigation canals (CIC), existing irrigation pipes (IP),cable, water, sewer, roads, and existing vegetation outside of the project limits. The Contractor shall repair any utilities damaged during construction at the sole expense of the Contractor. The following items shown on the drawing that will be relocated by others:

Existing power poles to be removed/relocated by others,

Existing trailers/buildings to be removed/relocated by others,

Existing structures will be removed/relocated by others including structures located on the southside of the levee,

Existing telephone pole to be relocated by others.

The Contractor shall limit all construction activities to the right-of-way limits shown on the Drawings including dedicated street right-of-way, and shall not disturb any areas other than as required for construction as shown on the Drawings.

The Contractor will grade all Temporary Construction and Permanent Easement areas, and project areas which are disturbed during construction to a condition similar to or better than the pre-existing condition.

3.5 CONTRACTOR'S RESPONSIBILITY FOR WORK

- a. Construction activities will occur within the Salt River. As recent as 1993 flows in excess of 100,000 cfs occurred in the river. Flows can occur at any time in the river, and nuisance flows are ever present in the river bottom. The Contractor shall protect his construction work and equipment from flows in the river. The Contracting Officer assumes no responsibility for notifying the Contractor of any anticipated flows, nor for any damages incurred by the Contractor to his equipment or to any of the Contractor's work as a result of any flows of water.
- b. The Contractor shall provide the Contracting Officer at the pre-construction conference with his plan for managing flows.
- c. The Contractor shall take all necessary action to protect the public from the construction work area including temporary safety fencing. The Contractor will also notify the Contracting Officer of any unauthorized personnel in the project area, including the presence of the general public.
- d. In accordance with the Environmental Impact Statement the Contractor shall avoid all areas of standing or running water wherever possible, however it may be necessary to operate equipment, including vehicles in areas of water. The Contractor should be aware that standing water in the excavated areas is not less than 36 hours duration for gabion mattress areas along the Holly Aces Levee and around guide dikes.

3.6 TRAFFIC CONTROL

Traffic control shall conform to Section 401 of the MAG Uniform Standard Specifications and COP Supplements except as modified herein.

This work shall consist of traffic control, and use of devices and flagmen or pilot cars in accordance with Section 401 of the COP Supplements and the City of Phoenix Traffic Barricade Manual, dated 1998.

- a. Traffic Control Devices

 All traffic and/or traffic control devices on this project shall be provided, maintained and/or controlled as specified in the City of Phoenix Traffic Barricade Manual, dated 1998.
- b. Street Closure Permits Permission to restrict city streets, sidewalks and alleys (street closure permits) shall be requested as specified in Section III of the City of Phoenix Traffic Barricade Manual.
- c. Traffic Manual Unless otherwise provided for in the following General Traffic Regulations, all traffic on this project shall be regulated as specified in Section IV of the City of Phoenix Traffic Barricade Manual.
- d. Prior Approval

No deviation to the General Traffic Regulation will be allowed or implemented unless submitted to the Contracting Officer for review and approval two weeks prior to the proposed work.

e. City of Phoenix Coordination
The Contractor shall contact Tony Arviso, Construction Traffic Control, City of Phoenix, at 602-262-6235 to coordinate the traffic control plan.

3.6.1 General Traffic Regulations:

- a. Local Access Requirements: The Contractor shall maintain local access to all side streets, access roads, driveways, alleys, and parking lots at all times unless specified to be closed herein or as shown on the traffic control plans, and shall notify residents 72 hours in advance of any restrictions which will affect their access. The Contractor shall restore the access as soon as possible. If the primary access cannot be restored in a timely manner, the Contractor shall provide an alternative which shall be predetermined with the residents prior to imposing any restrictions, and approved by the Contracting Officer.
- b. Special Sign Requirements: The Contractor shall provide, erect and maintain advance notifications, and informational and directional access signs that may be required by the Contracting Officer.
- c. Flagging of Traffic: No flagging of traffic will be permitted during the peak traffic hours of 6:00 a.m. to 8:30 a.m. and 4:00 p.m. to 7:00 p.m. weekdays. If construction requires, intermittent flagging will be allowed from 8:30 a.m. to 4:00 p.m. on weekdays and weekends to facilitate access for heavy construction equipment.
- d. Traffic Control Plan: The Contractor shall submit a traffic control plan which shall implement all traffic control as required for approval, showing placement of all traffic control devices, including all conflicting signs to be covered/removed or relocated, or other features that may conflict with the placement of temporary signage. The plan shall be submitted to the Contracting Officer at the pre-construction meeting for review. The Contractor shall obtain approval from the Contracting Officer and the City of Phoenix, prior to implementation. Contact Tony Arviso/City of Phoenix at 602-262-6235.
- e. At the time of the Pre-Construction conference, the Contractor shall designate an employee, other than the Project Superintendent, who is well qualified and experienced in construction traffic control and safety, to be available on the project site during all periods of construction to set up, maintain and coordinate safe barricading whenever construction restricts traffic. This individual shall be authorized to receive and fulfill instructions from the Contracting Officer and shall supervise and direct the work. Instructions and information given

by the Contracting Officer to this individual shall be considered as having been given to the Contractor.

3.6.2 Special Traffic Regulations

Contractor access to the river bottom is available at the following locations using City of Phoenix rights-of-way:

- a. Left turns across traffic are acceptable only if there is a left turn center lane. If no center lane, then right turns only. Possible exceptions to this requirement may be provided by the City through an approved TCP.
- b. Off duty uniformed officers shall be utilized for traffic control only as required by the City of Phoenix, and only as approved by the Contracting Officer. An off duty officer will be required wherever multiple lanes of traffic must be crossed with construction equipment.
- c. A TCP must be provided to the City for review and approval for each access location prior to implementation of the plan. The TCP must include appropriate signage for "truck crossing", etc.

The Contractor shall restore and regrade the areas within the Temporary Construction Easement limits to the same grade as prior to construction. All trash, large rocks, other debris, etc. shall be removed and the easement area left in a neat and clean condition acceptable to the Contracting Officer.

3.7 CONSTRUCTION OF SIGNS

3.7.1 Project Safety and Hard Hat Signs

Project safety and hard hat signs shall be constructed as detailed on Figure 1,2, and safety signs. Government decals will be furnished by the Contracting Officer. Contractor is responsible for obtaining sponsor's decal.

3.7.2 Warning Signs

Warning Signs shall be constructed of plywood not less than 1/2-inch thick and shall be securely bolted to the supports with the bottom of the sign face 3 feet above the ground. The sign face shall be 2 x 4 feet, all letters shall be 4 inches in height, and the wording shall be: "WARNING: OVERHEAD TRANSMISSION LINES."

3.8 PAINTING SIGNS

All exposed surfaces and edges of plywood shall be given one coat of linseed oil and be wiped prior to applying primer. All exposed surfaces of signs and supports shall be given one coat of primer and 2 finish coats of white paint. Except as otherwise indicated, lettering on all signs shall be black and sized as indicated.

3.9 SCRAP MATERIAL

Materials indicated to be removed and not indicated to be salvaged, stored or reinstalled are designated as scrap and shall become the property of the Contractor and be removed from the site of work. The Contractor by signing this contract hereby acknowledges that he made due allowance for value, if any, of such scrap in the contract price.

3.10 PUBLIC SAFETY

Attention is invited to the CONTRACT CLAUSE: PERMITS AND RESPONSIBILITIES. The Contractor shall provide the safety plan including temporary fencing, barricades, and/or guards, as required Safety Plan to the Contracting Offier for approval. The safety plan shall provide protection in the interest of public safety. Whenever the Contractor's operations create a condition hazardous to the public, he shall furnish at his own expense and without cost to the Government, such flagmen and guards as are necessary to give adequate warning to the public of any dangerous conditions to be encountered and he shall furnish, erect, or maintain such fences, barricades, lights, signs and other devices as are necessary to prevent accidents and avoid damage or injury to the public. Flagmen and guards, while on duty and assigned to give warning and safety devices shall conform to applicable city, county, and state requirements. Should the Contractor appear to be neglectful or negligent in furnishing adequate warning and protection measures, the Contracting Officer may direct attention to the existence of a hazard and the necessary warning and protective measures shall be furnished and installed by the Contractor without additional cost to the Government. Should the Contracting Officer point out the inadequacy of warning and protective measures, such action of the Contracting Officer shall not relieve the Contractor from any responsibility for public safety or abrogate his obligation to furnish and pay for those devices. installation of any general illumination shall not relieve the Contractor of his responsibility for furnishing and maintaining any protective facility.

3.11 CONTRACTOR'S SURVEYS

3.11.1 Survey Data

Reference is made to SECTION 00800: SPECIAL CONTRACT REQUIREMENTS, QUANTITY SURVEYS, ALTERNATE I, FAR 52.236.16 which requires payments based on surveys. progress payments will be based upon Contractor's surveys. The Contractor Surveys shall provide full coverage of the entire area for which progress payment is being made.

It is further emphasized that survey data that does not meet all applicable requirements and quality assurance verifications will not constitute a valid request for payment.

Contractor's surveys shall be performed electronically (automated) and the data shall be provided and submitted to the Government on an electronic media (IBM compatible, ASCII format) in delimited files of eastings, northing, and depth (x,y,z), where the depth is indicated as positive if recorded above mean sea level. The first lines of data file will list the formation as follow:

* Project Name: TRES RIOS ENVIRONMENTAL RESTORATION/FLOOD CONTROL NORTH LEVEE PHASE 1A

- * Surveyor's Name and Company's Name
- * Area Surveyed
- * Type of Survey and Date of Survey (i.e. Pre-construction, MM/DD/YR
- * Vertical Datum
- * Horizontal Datum

These first six (6) lines will be preceded by an asterisk (*), which indicates comment line.

For both the pre-construction and post-construction surveys, these three copies of the survey plotted on paper will accompany the x,y,x data (electronic file) and all data shall be collected and plotted in english units (feet).

3.11.2 Survey Data Standard

The Contractor's surveys for progress payment shall meet or exceed the survey standards listed in COE EM 1110-1-1005, Topographic Surveying for Photographic Surveys. Survey shall be in the Arizona State Plane Coordinate System, Central Zone, 1992 EPOCH, U.S. Survey-feet, and be performed by an independent survey contractor with at least three (3) years of experience in topographic surveying of land features and have either a current land surveyor's or a Professional Engineer's license, authorized to certify surveys in the State of Arizona. The Topographic Surveyor firm selected by the Contractor must be approved by the Contracting Officer prior to performing surveys for this contract.

3.11.3 Positioning System

It is required that surveys shall be conducted using an RTK or similar modern electronic surveying equipment using Differential Global Positioning System (GDPS) with positional accuracy equal to or exceeding the survey standards listed in COE EM 1110-1-1003 and COE EM 1110-1-1005

3.11.4 Survey Firm Acceptance

For the Contracting Officer to approve the selected survey firm, the Contractor must provide documentation indicating that modern electronic surveying equipment will be used for the surveys to be performed as well as documentation verifying the experience of the operators using the equipment. Typical information that will be required, as a minimum, includes that name, model, and year of manufacture of the electronic equipment, and the manufacture's stated accuracies, and capability of the equipment proposed for usage. The Contractor shall submit credentials/qualifications as evidence that qualified, experienced staff are available and will be used for the operation of the electronic positioning and surveying equipment.

3.11.5 Data Processing

The Contractor shall use a Data Processing System to map the survey data and calculate quantities. Reduced survey data shall then be imported into the Data Processing System where cross-sections are compared to fill template and volume quantities are calculated. The software shall be capable of digital terrain modeling and shall produce, as a minimum, topographic survey sheets, cross section profiles, 3-dimensional area profiles, and quantity volume calculations using the Triangulated Irregular Network (TIN) method

3.12 MAINTENANCE ROAD

The Contractor shall touch up the surface of the Maintenance road as the last element of work or as approved by the Contracting Officer.

-- End of Section --

1.2.24.2 Payment

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SECTION 01270

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SECTION 01270

MEASUREMENT AND PAYMENT

PART 1 General

1.1 LUMP SUM PAYMENT ITEMS

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the BIDDING SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided. Some of the lump sum payment items reference drawings, plans and photos for verification purposes

1.1.1 Diversion and Control of Water (Bid Item 0001)

Payment for Diversion and Control of Water will be made at the applicable contract price, which payment shall constitute full compensation for control of storm water, irrigation, and miscellaneous runoffs to prevent adverse impacts to the project or downstream properties. This payment will also include control of ground water for construction of 12" thick gabion mattresses along the existing Holy Acres Levee's riverside toe and around the footprint of guide dikes. (see attached photos at the end of this section for existing gabion mattress).

A site visit conducted on June 23rd, 05 reveals that water surface level is approximately about 1 (one) foot above the current ground surface at the toe of the existing Holy Acres Levee, that is higher than it was in the attached photos.

1.1.2 Relocation/Replacement of Existing Concrete Irrigation Canals and Irrigation Pipe (Bid Item 0004)

Payment for Relocation/Replacement of portion of the Existing Irrigation Canals (CIC) and Pipe will be made at the applicable contract price, which payment shall constitute full compensation for site preparation, concrete irrigation canals (CIC) and pipe, and relocation of these features to lines and grades indicated on the drawings. Payment will not cover demolishing, removing and disposing of CIC's and CIP. Payment for demolish, removal and disposal is covered in the section 1.2.1 Clear Site and Remove Obstructions below and in compliance with Specifications Section 02230 Clear Site and Remove Obstructions

1.1.3 Hydroseeding, Catch Basin (Bid Item 0031)

Payment will be made for costs associated with operations necessary for providing all labor, materials, and equipment for furnishing, transporting, and installing the hydroseed area contributing full compensation for mixing, spraying the hydromulch, soil preparation, soil tests, complete. Payment will not include reseeding of areas required as a result of Contractor's negligence or damages caused by Contractor, as specified

1.1.4 Maintenance During Seed Establishment (Bid Item 0031)

Payment will be made for costs associated with operations necessary for providing all labor, materials, and equipment for 6 months maintenance during seed establishment including post fertilization, temporary irrigation (including water cost), weeding, trash removal and maintenance reports, complete. Payment includes reseeding of areas required in Section 02921 Seeding under paragraph Satisfactory Stand of (seeded) Plants, as specified.

1.1.5 As-Built Drawings (Bid Item 0034)

Payment for as-built Drawings will be made at the applicable contract price, which payment shall constitute full compensation for providing the project Preliminary and Final As-Built Drawings and in compliance with specifications section 01702 AS-BUILT DRAWINGS. Payment also includes eletronic final As-Built Drawings in Bently Microstation J and AutoCADD Released 2000i.

1.2 UNIT PRICE PAYMENT ITEMS

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the BIDDING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

1.2.1 Clear Site and Remove Obstructions - All Areas (Bid Item 0002)

Payment for Clear Site and Remove Obstructions - All Areas, will be made at the applicable contract price, which payment shall constitute full compensation for clearing existing surface debris (including trash, concrete rubble, construction debris, old pavement, tree trimmings, furniture, appliances and parts thereof, automobiles and parts thereof) and clearing improvements (including existing corrugated metal pipe (CMP), existing fence and gates, existing asphalt concrete (AC) roads, existing concrete catch basins, existing posts, and existing concrete headwalls) where indicated on the plans and specifications, and vegetation and grubbing areas of excavation, and areas to be graded, and areas to receive fill, or other approved areas necessary for the Contractor's operations within the limits of the designated levee right-of-way including areas of Levee, Collector Channels, Dikes, and Borrow Areas as needed; disposal off-site of all vegetation and removed improvements and existing debris such as old pavement, tree trimmings, trash, whole or parts of furnitures and appliances, automobile bodies and automobile parts, etc; removing and plugging abandoned utilities including waterlines; and the protection of existing facilities to remain in place, and scheduling and coordination of the clear site and remove obstructions - all areas work to comply with Section 01200 GENERAL REQUIREMENTS. Payment will also include demolition, clearing & removal of buildings or other structures within the limits of the rights of way

including but not limited to the improvements and structures shown on the drawings, and including foundations, subgrade structures, utilities and all features associated with the removed structure. Payment will also include associated structures with construction of the levee, collector channels, dikes.

1.2.2 Removal, Stockpile and Salvage of Existing 15" Slope Protection 6"
Bedding Material and filter fabric, Levee Sta. 153+72.90 through Sta.168+00
and RCB Culverts (Bid Item 0003)3)

1.2.2.1 Measurement

Unless specified or approved, removal, stockpile and salvage of existing 15" slope protection and 6" bedding materials will be measured for payment by computing the volume by the ton (2000 pounds) of existing 15" slope protection and 6" bedding material removed, stockpiled and salvaged within lines and grade indicated on the drawnigs.

1.2.2.2 Payment

Payment for removal, stockpile and salvage of existing 15" riprap and 6 " bedding layer will be made at the applicable contract unit price per ton (2000 pounds), which payment shall constitute full compensation for work required for demolishing and disposal of existing soil cement where needed and unwanted materials, removing, stockpiling and salvage of 15" stone protection and 6" bedding material, including all other related items necessary and incidental to removal of all unwanted materials for preparation of levee enlargement and RCB culverts construction as indicated on the drawings, complete.

1.2.3 Seal the Existing CMP Along Holy Acres Levee(Bid Item 0005

1.2.3.1 Measurement

Measurement of sealing existing Corrugated Metal and Reinforced Concrete Pipes (CMP & RCP) will be by the cubic yard (CY)of Controlled Low Strenth Material (CLSM) actually injected inside the existing CMP&RCP.

1.2.3.2 Payment

Payment for sealing the existing 18" CMP's and RCP's will be made at the applicable contract unit price per cubic yard of Controlled Low Strength Material (CLSM) fully injected inside the CMP and as directed, which payment shall constitute full compensation for furnishing and placing, including all other related work necessary and incidental to the task required to seal all pipes complete, for the entire legnth of the CMP's (inlet to outlet).

1.2.4 Stripping and Dispose of 6" Top Soil, Levee (Bid Item 0006)

1.2.4.1 Measurement

Measurement of Stripping and Disposal of 6" Top Soil, levee and dikes, will be by cubic yard of material stripped to 6" deep below the existing ground and between the levee and dikes foot prints and dispose of, complete.

1.2.4.2 Payment

Payment for Stripping and Disposal of 6" Top Soil for levee and dikes will be made at the applicable contract unit price per cubic yard of top soil removed and dispose of prior to placing fill material, which paymeny shall constitute full compensation for work required for removing and disposal of excavated material.

1.2.5 Compacted Fill, Levee and Dikes (Bid Item 0007)

1.2.5.1 Measurement

Measurement for Levee and Dikes Compacted Fill will be made between the required excavation and the fill limit lines, or between the finished 6" stripped lines and fill lines, as indicated or staked in the field. Quantities will be computed in cubic yards by the average end area method and the planimeter will be considered a precise instrument for measuring plotted cross sections, or the Contractor may utilize the triangulated irregular network (TIN) method for calculating quantities. No measurement for payment will be made for backfill of any over excavation for temporary access and haul roads for the Contractor's convenience.

1.2.5.2 Payment

Payment for Levee and Dikes Compacted Fill will be made at the applicable contract price, which payment shall constitute full compensation for obtaining any necessary material, foundation preparation, placing, slope benching, spreading, discing and compacting the fill, complete.

1.2.6 2" Gravel/Rock Mulch Protection, Levee and Catch Basin(Bid Item 0008)

1.2.6.1 Measurement

Measurement of Gravel/Rock Mulch Protection, Levee and Catch Basin cut slopes will be by the cubic yards of the Gravel/Rock Mulch Protection placed within the lines and grades indicated on the drawings and directed. quantities in cubic yards will be computed based on the 2"-thick gravel/rock mulch layer and the surface areas of the levee landside slope and catch basin excavation slopes.

1.2.6.2 Payment

Payment for Gravel/Rock Mulch Protection will be made at the applicable contract unit price per cubic yard, which payment shall constitute full compensation for all labor, materials, equipment, and all other items necessary and incidental to the placement of the gravel/rock mulch, complete, including subgrade preparation. No separate payment will be made for water to settle the rock mulch.

1.2.7 15" Stone/Riprap Slope Protection, Levee (Bid Item 0009)

1.2.7.1 Measurement

Measurement of 15" Stone/Riprap Slope Protection, Levee, will be by the ton (2000 pounds) of 15" stone/riprap slope protection, levee, placed within the lines and grades including levee toe-down indicated on the drawings for 15" thick stone/riprap.

1.2.7.2 Payment

Payment for 15" Stone/Riprap Slope Protection, Levee, will be made at the applicable contract unit price per ton(2000 pounds), which payment shall constitute full compensation for work required for furnishing, placing and installation of 15" Stone/Riprap Slope Protection, Levee, including all other related items neccessary and incidental to construction of this item, including levee toe-downs, complete, as shown on the drawings.

1.2.8 Grouted Protection, Access Ramp, Turn-Around, RCB Culverts and Collector Channel (Bid Item 0010))

1.2.8.1 Measurement

Measurement of Grout Protection, Access Ramp, RCB Culvert and Collector Channel will be in cubic yards of grout for the stated features, placed within the lines and grades indicated on the drawings or as directed

1.2.8.2 Payment

Payment for Grout Protection, Access Ramps, RCB Culvert and the Collector channel, will be made at the applicable contract unit price per cubic yard, which payment shall constitute full compensation for work required for furnishing, mixing, injecting or placing grout, including all other related items necessary and incidental to placement of this item, complete, as shown on the drawings.

1.2.9 15" Stone Protection, Access Ramp, RCB culvert and The Collector Channel (Bid Item 0011))

1.2.9.1 Measurement

Measurement of 15" Stone Protection, Access Ramps, RCB Culvert and the Collector Channel, will be by the ton (2000 pounds) of 15" Stone Protection, Access Ramps, Turn-Around Areas, RCB Culverts and the Collector Channel, placed within the lines and grades indicated on the drawings and as directed for 15" thick stone.

1.2.9.2 Payment

Payment for 15" Stone Protection, Access Ramps, Turn-Around Areas, RCB culverts and The Collector Channel, will be made at the applicable contract unit price per ton(2000 pounds), which payment shall constitute full compensation for work required for furnishing, placing and installation of 15" Stone Protection on Access Ramps, Turn-Arounds, RCB Culverts and the Collector Channel, including all other related items neccessary and incidental to construction of this item, as shown on the drawings.

1.2.10 4" Bedding Material, Levee and Dikes (Bid Item 0012)

1.2.10.1 Measurement

Measurement of 4" Bedding Material, Levee and Dikes will be by the cubic yard of 4" Bedding Material, Levee and Dikes, placed within the lines and grades indicated on the drawings for bedding material.

1.2.10.2 Payment

Payment for 4" Bedding Material, Levee and Dikes will be made at the applicable contract unit price per cubic yard, which payment shall constitute full compensation for work required for installation of 4" Bedding Material as a layer to protect from damaging geotextile filter fabric, Levee and Dikes, including furnishing, placing, and compacting the 4" Bedding Material, Levee and Dikes, complete, including subgrade preparation.

1.2.11 Filter Fabric, Levee and Dike (Bid Item 0013)

1.2.11.1 Measurement

Installed Filter Fabric for Levee, Dikes and Access Ramp will be measured for payment in place to the nearest square yard of protected area as delineated in the drawings and as directed

1.2.11.2 Payment

Payment for filter Fabric, Levee, Dikes and Access Ramp will be made at the contract unit price, which price shall constitute full compensation for providing all plant, labor, material, and equipment and performing all operations necessary for the complete and satisfactory installation of the Levee, Dikes and Access Ramp Filter Fabric. The following items are included in the contract unit price for Levee, Dikesand Access Ramp Filter Fabric and shall not be counted a second time in the process of determining the extent of Levee Filter Fabric placed: Material and associated equipment and operation used in laps, seams, or extra length; securing pins and associated material, equipment, and operations; and material and associated equipment and operations used to provide cushioning layer of sand or gravel or both to permit increase in allowable drop height of stone. No payment will be made for Levee, Dikes and Access Ramp Filter Fabric replaced because of waste, contamination, damage, repair, or due to contractor fault or negligence.

1.2.12 3" ABC, O&M Roads (Bid Item 0014)

1.2.12.1 Measurement

Measurement of Levee 3" ABC, O&M Roads and Access Ramp will be by the ton (2,000 pounds) of 3" ABC, O&M Roads placed within the lines and grades indicated on the drawings for 3" ABC, O&M Roads.

1.2.12.2 Payment

Payment for 3" ABC, O&M Roads and Access Ramp will be made at the applicable contract unit price per ton, which payment shall constitute full compensation for work required for installation of 3" ABC, O&M Roads, including furnishing, placing, and compacting the 3" ABC, O&M Roads, complete and as directed. This payment also includes subgrade preparation for both the Dryside O&M Road and the Levee Crest O&M Road as well as Access Ramp.

1.2.13 Excavation, Levee Toe-Down (Bid Item 0015)

1.2.13.1 Measurement

Unless specified or approved otherwise, excavation items will be measured for payment by computing the volume in cubic yards, using plotted surveyed cross sections and the average end area method or the triangulated irregular network (TIN) method. Excavated materials will be measured for payment from its original position. Paylines for excavation is the finished grade as shown on the cross sections. No measurement for payment will be made for over excavation exceeding the paylines, nor for construction, removal of haul roads, dressing, drainage and road surfacing materials, or for the disposal of the excavated materials from over excavation and construction and maintenance of access haul roads.

1.2.13.2 Payment

Payment for Excavation, Levee Toe-Down will be made at the applicable contract price, which payment constitute full compensation for excavating all material including but not limited to silt, sand, gravel, buried asphalt, buried vegetation, buried trash, and other buried debris, stockpiling, and disposition of all excavated material that are unsuitable for fill, and in accordance with specifications.

1.2.14 Miscellaneous Backfill, Levee Toe-Down (Bid Item 0016)

1.2.14.1 Measurement

Unless specified or approved otherwise, Miscellaneous backfill items will be measured for payment by computing the volume in cubic yards, using plotted surveyed cross sections and the average end area method or the triangulated irregular network (TIN) method. Miscellaneous Backfill materials will be measured for payment from its completed position. Payline for backfill will be as shown on the drawings, which is the finished grade line matching the pre-existing ground surface or directed. No measurement for payment will be made for backfill of construction, removal of haul roads, dressing, drainage and road surfacing materials, and construction and maintenance of access haul roads.

1.2.14.2 Payment

Payment for Miscellaneous Backfill, Levee Toe-Down, will be made at the applicable contract price, which payment shall constitute full compensation for miscellaneous material including but not limited to silt, sand, gravel and cobbles, hauling, stockpiling, processing, and disposition of all unsuitable backfill material as well as spreading excess material within the area as directed, and for compacting backfill from suitable fill materials in accordance with specifications.

1.2.15 Excvation, Catch Basin (Bid Item 0017)

1.2.15.1 Measurement

Excavation of materials for the 115th Avenue Catch Basin consists of the Basin and V-North Ditch shown on the drawings, will be measure for payment by computing the volume in cubic yards actually excavated and removed, using plotted surveyed cross sections and the average end area method or the triangulated irregular network (TIN) method. Excavated materials will be measured for payment from its originally position to the finished grade. Paylines for excavation is the finished grade as shown on the drawings. No measurement for payment will be made for over excavation exceeding the paylines, nor for the construction, haul roads, dressing and drainage, and in accordance with specifications.

1.2.15.2 Payment

Payment for Excavation, 115th Avenue Catch Basin including V-North Ditch, will be made at the applicable contract unit price per cubic yard of material excavated and removed, which payment shall constitute full compensation for excavating all material within the basin excavation paylines and design grades including but not limited to silt, sand, gravel, buried asphalt, buried vegetation, buried trash, and other buried debris, no payment will be made for over excavation exceeding the paylines and design grades, nor for the construction, haul roads, dressing and drainage, and in accordance with specifications. The Contractor shall backfill and compact to the required specifications over excavated areas to lines and grades indicated on the contract drawings or directed.

1.2.16 Grading, Catch Basin (Bid Item 0018)

1.2.16.1 Payment

Payment for Grading of Catch Basin consists of final grading and shaping of the Basin, V-North Ditch and outside perimeter of the basin as directed. Payment for Grading will be made at the applicable contract price, which payment shall constitute full compensation for shaping and final grading of Catch basin, V-North Ditch and perimeter outside of the Basin as directed, complete, as shown on the drawings.

1.2.17 Four-Wire R/W Fence (Bid Item 0019)

1.2.17.1 Measurement

Measurement of Four-wire R/W fence will be by the linear feet of Four-wire R/W fence constructed as shown on the drawings.

1.2.17.2 Payment.

Payment for Four-wire R/W Fence will be made at the applicable contract price, which payment shall constitute full compensation for fencing, including all posts, wire, braces, concrete, concrete footings,

grounding, and all incidentals, complete as shown on the drawings.

1.2.18 14' Wide Double Swing Gates (Bid Item 0020)

1.2.18.1 Measurement

Measurement of 14' wide double swing gates will be the number of double swing gates acceptably installed

1.2.18.2 Payment

Payment for 14' wide Double Swing Gate will be made at the applicable contract price, which payment shall constitute full compensation for fabricating and installing the double swing gates, complete, including posts with caps, chain link fabric, frame members, tension bands, truss rods, stretcher bars, wire ties, truss wire, sleeves, hinges, grout, concrete, stops, padlocks and reflector, and all incidentals, complete, as shown on the drawings.

1.2.19 27" and 33" Riprap Slope Protection, Dikes (bid Items 0021 and 0022)

1.2.19.1 Measurement

Measurement of 27" and 33" Riprap Slope Protection, Dikes (E. 115th Avenue, W. 113th Avenue & E. 113th Avenue) and (95th Avenue), will be by the ton (2000 pounds) of 27" and 33" Riprap Slope Protection, placed within the lines and grades indicated on the drawings or directed for Dikes, 27" and 33" Riprap Stone Protection.

1.2.19.2 Payment

Payment for 27" Riprap Protection, Dikes, will be made at the applicable contract unit price per ton (2000 pounds), which payment shall constitute full compensation for work required for furnishing, placing and installation of 27" Riprap Slope Protection for Dikes, including all earthwork related to construction of this item, complete, as shown on the drawings, and in compliance with specification 02380 STONE PROTECTION.

1.2.20 Excavation and Spreading, Levee and Dikes Gabion Mattress Scour Aprons (Bid Item 0023)

1.2.20.1 Measurement

Excavation and Spreading of excavated material, Levee and Dikes Gabion Mattress Scour Aprons will be measure for payment by computing the volume in cubic yards removed, using plotted surveyed cross sections and the average end area method or the triangulated irregular network (TIN) method. Excavated materials will be measured for payment from its originally position to the finished/directed grade. Depth of excavation is about 1 foot deep below the existing ground surface for the gabion mattress along the current Holly Acres Levee and dikes. Paylines for excavation for levee and dikes gabion mattress is the finished grade as shown on the drawings.

Excavation to expose the edge of the existing gabion mattress along the existing Holy Acres Levee will be included in the measurement. The Contractor will be expected to supply full control of excavation activities in order to insure that existing edges of gabion mattresses are not damaged during excavation to expose the edges (see photos in the Bid Schedule for reference). No measurement for payment will be made for over excavation without approval of the Contracting Officer, haul roads, dressing and drainage, and in compliance with with specifications.

1.2.20.2 Payment

Payment for Excavation and Spreading of excavated materials, Levee and Dikes Gabion Mattress Scour Aprons, will be made at the applicable contract unit price per cubic yard of material removed and spreaded, which payment shall constitute full compensation for excavating and spreading all material including but not limited to silt, sand, gravel, buried asphalt, buried vegetation, buried trash, and other buried debris, hauling, stockpiling, and in compliance with specifications and as directed.

1.2.21 12" Gabion Mattress Scour Apron, Levee and Dikes (Bid Item 0024)

1.2.21.1 Measurement

Measurement of 12" Gabion Mattress Scour Apron, Levee and Dikes, will be by the ton (2,000 pounds) of the 12" Gabion Mattress Scour Apron, placed within the lines and grades indicated on the drawings or directed for 12" Gabion Mattress Scour Apron, Levee and Dikes, and in compliance with specifications section 02371.

1.2.21.2 Payment

Payment for 12" Gabion Mattress Scour Apron, Levee and Dikes will be made at the applicable contract unit price per ton, which payment shall constitute full compensation for work required for installation of 12" Gabion Mattress Scour Apron, Levee and Dikes, including all neccessary materials, furnishing, placing, and adjusting 12" Gabion Mattress Scour Aprons, complete, including subgrade preparation. This payment also includes labor required for fastening the existing gabion mattress to the new mattress baskets located along the existing Holy Acres Levee, and in compliance with specifications section 02371.

1.2.22 Interior Drainage Excavation, Collector Channel and RCB Culverts (Bid Item 0025)

1.2.22.1 Measurement

Interior Drainage Excavation, Collector Channel and RCB Culverts will be measure for payment by cubic yards. Quantities will be computed in cubic yards by the average end area method and the planimeter will be considered a precise instrument for measurement of plotted cross sections. Materials excavated from the collector channel will be measured for payment by cubic yards from its originally position to the finished grade including channel over-excavated area used for dryside O&M Roads as shown on the drawings. Paylines for excavation of the collector channel is the finished grade.

Interior Driange Excavation, RCB Culverts will be measured for payment by cubic yards, including removal, stockpile and salvage of existing 15" riprap and bedding material along the 113th Avenue and through the levee at 115th Avenue indicated on the drawings. The quantity of directed excavation necessary for the removal of unsatisfactory foundation material as specified shall be included in the measurement of the

excavation where the unsatisfactory soils are encountered. Quantities will be computed in cubic yards by the average end area method and the planimeter will be considered a precise instrument for measurement of plotted cross sections. The Contractor has the option of using computer methods for quantity estimations, but all computer methods of quantity estimations shall be approved by the Contracting Officer. All excavation outside of excavation lines shown on the drawings will be considered as being for convenience of the Contractor. No measurement for payment will be made for over excavation without approval of the Contracting Officer, haul roads, dressing and drainage, and in compliance with with specifications.

1.2.22.2 Payment

Payment for Interior Drainage Excavation, Collector Channel and RCB Culverts, will be made at the applicable contract unit price per cubic yards of excavated material shown on the drawings, which payment shall constitute full compensation for excavation for the collector channel and RCB culverts described in the following payment paragraphs, and also including inspection trenches, roads and other areas as indicated on the drawings including cemented alluvium excavation for 115th Avenue RCB culvert; shaping and trimming of areas to receive concrete or fill material, loading, crushing, processing, hauling, and stockpiling of suitable materials for backfills for the RCB culverts. Payment will not be included the quantity included in clearing and grubbing and other earthwork requirements for which separate payments are provided, including shoring and excavation outside the excavation limits indicated on the drawings or staked in the field.

1.2.23 Interior Drainage Structural Compaction, Collector Channel and RCB Culverts (Bid Item 0026)

1.2.23.1 Measurement

Measurement for Interior Drainage Structural Compaction, Collector Channel and RCB Culverts will be made between the structure lines and the fill limit lines, or between the ground lines and fill lines, as indicated or staked in the field. Quantities will be computed in by the average end area method and the planimeter will be considered a precise instrument for measuring plotted cross sections. The Contractor has the option of using computer methods of quantity estimation, but all computer methods of quantity estimation shall be approved by the Contracting Officer.

1.2.23.2 Payment

Payment for Interior Drainage Structural Compaction, Collector Channel and RCB Culverts will be made at the applicable contract price, which payment shall constitute full compensation for placing, shaping, grading, filling behind the RCB and channel walls and atop the RCB top slab, and other RCB areas shown on the drawings, and compacting the fill, complete. Some areas may require hand compaction instead of mechanical mean. Payment will not be included for fills outside the fill limits indicated on the drawings or staked in the field, and other fill requirements for which separate payments are provided.

1.2.24 Interior Drainage Concrete, Collector Channel and RCB Culverts (Bid Item 0027)

1.2.24.1 Measurement

Measurement of Interior Drainage Concrete, Collector Channel and RCB Culverts, will be made on the basis of the actual volume, in cubic yards, of concrete within the pay lines of the Collector Channel and RCB Culverts, as shown on the drawings. Measurement of concrete placed against the sides of any excavation without the use of intervening forms will be made only within the pay lines of the structures. No deductions will be made for rounded or beveled edges or space occupied by metalwork, nor voids or embedded items which are either less than 0.2 cubic yard (5.3 cubic feet) in volume or one-tenth of square yard in cross section. Concrete placed in items of work other than those specifically mentioned above, and concrete wasted or used for the convenience of the Contractor will not be included in measurement for payment.

1.2.24.2 Payment

Payment for the concrete items will be made at the applicable contract prices for the various items of the schedule, which payments shall constitute full compensation for labor, materials (except reinforcing steel for which separate payment is provided), joint sealant, forming, finishing concrete, curing concrete, cutoff walls that are part of 3x5 RCB, Collector Channel, and Storm Drain Channel construction, and for all equipment and tools to complete the concrete work, complete except earthwork. Embedded items (such as entire weep holes including filter material components, and sleeves, and railing or fence posts) shall be included in the cost of the concrete except when other payment is specifically provided. No payment will be made for concrete, as such, which is placed in structures for which payment is made on a lump sum basis.

1.2.25 Interior Drainage Rebar, Collector Channel and RCB Culverts (bid Item 0028)

1.2.25.1 Measurement

Measurement of reinforcing steel in tons (2,000 pounds) is limited to reinforcement in concrete structures paid for on a cubic yard basis. Measurement will be made of the lengths of bars actually placed in the completed work in accordance with the plans and specifications, approved bar schedules, or as directed. The measured lengths will converted to weights for the bar numbers listed by the unit weights per linear foot contained in ASTM A 615. Steel in laps indicated on the drawings, in the specifications, or required by the Contracting Officer will be included in measurement for payment. No measurement will be made for the additional steel in laps which are authorized for the convenience of the Contractor. No measurement will be made of steel supports or spacers. All costs for furnishing and installing supports and spacers shall be included in the various structures requiring the reinforcement.

1.2.25.2 Payment

Payment for Reinforcing Steel will be made at the applicable contract price, which payment shall constitute full compensation for furnishing and installing steel reinforcement, complete. No payment will be made for steel reinforcement which is placed in structures for which payment is made on a lump sum basis.

1.2.26 Interior Drainage Flap gates, RCB Culvert (Bid Item 0029)

1.2.26.1 Measurement

Measurement of Interior Drainage Flap Gates, RCB Culvert, will be the number of flap gates acceptably installed.

1.2.26.2 Payment

Payment for Interior Drainage Flap Gates, RCB Culvert, will be made at the applicable contract price, which payment shall constitute full compensation for fabricating and installing the flap gates, complete and in compliance with specifications section 05500 MICSCELLANEOUS METAL, including all necessary earthwork, concrete work, including all necessary metal work, foundation work, flap gate structure installation necessary to support flap gates, including furnishing, placing, finishing and curing concrete, including equipment and supports necessary during installation of flap gates, frame members, sleeves, hinges, grout, concrete, stops, and all incidentals, complete, as recommended by manufacture. The earthwork included in this item shall be only that earthwork which is located outside the limits of earthwork for which other payment is provided.

1.2.27 RCB Culvert Headwalls (Bid Item 0030)

1.2.27.1 Measurement

Measurement of Interior Drainage Concrete Headwalls, RCB Culvert, will be the number of headwalls acceptably constructed/installed

1.2.27.2 Payment

Payment for Concrete Headwalls, RCB Culvert, will be made at the applicable contract price, which payment shall constitute full compensation for all concrete, including all necessary items described in the Paragraph "Interior Drainage Concrete" above and related items necessary and incidental to construction/installation of the headwalls for the RCB culvert structure (inlet and outlet), including furnishing and placing reinforcing steel, complete as shown on the drawings

1.2.28 Survey Markers Installation, Levee (Bid Item 0033)

1.2.28.1 Measurement

Measurement for Survey Marker Installation, Levee will be the number of survey markers acceptably installed at the interval of 1000 feet and as directed.

1.2.28.2 Payment

Payment for Survey Markers, Levee will be made at the applicable contract unit price, which payment shall constitute full compensation for installing the survey markers, complete, including all necessary earthwork, concrete work, including all necessary metal work, including furnishing, placing, finishing and curing concrete, including equipment, concrete, and all incidentals, complete, as shown on the drawings.

1.3 Subgrade or Foundation Preparation

No separate payment will be made for subgrade or foundation preparation, including required shaping and cleaning of any bedrock abutments and placement of mortar or concrete as necessary, and all costs in connection therewith shall be included in the contract prices for excavation or the items to which the work applies.

1.4 Satisfactory Soils

No separate payment will be made for the excavation, hauling, and disposal of unsatisfactory soils. When such excavation is directed, payment therefore will be included in the applicable contract price for the items of work under which the unsuitable soils are encountered. When there is no applicable contract item an adjustment will be made.

1.5 Excavation for Structures

No separate payment will be made for excavation for structures such as manholes, outlet structures, stilling wells, and headwalls. All costs therefore shall be included in the applicable contract item to which the work applies.

1.6 Trenches

No separate payment will be made for the excavation and disposal of pipe trenches. All costs therefore shall be included in the applicable contract prices for the items to which the work applies.

1.7 Shoring

Except where otherwise directed within specific bid items, no separate payment will be made for shoring. The Contractor shall be responsible for method of construction and the use of shoring, stable slope cuts, or other trench safety requirements.

1.8 Excavation for Utilities

No separate payment will be made for excavation for utilities. All costs therefore shall be included in the applicable contract item to which the work applies.

1.9 Fill or Backfill Around Structures.

No separate payment will be made for fill or backfill around structures. All such costs shall be

included in the applicable contract prices for structure items to which the work applies.

1.10 Subgrade Preparation.

No separate payment will be made for subgrade preparation and all costs in connection therewith shall be included in the contract prices for items to which the work applies.

- PART 2 PRODUCTS (NOT USED)
- PART 3 EXECUTION (NOT USED)
 - -- End of Section --

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SECTION 02100

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SECTION 02100

DIVERSION AND CONTROL OF WATER

PART 1 GENERAL

1.1 REQUIREMENT

1.1.1 General

Most construction shall be carried on in areas free from water. Storm runoff from watersheds can be rapid and, during periods of rain, flash flooding may be expected. The project consists of improvements to a natural drainage course. Furthermore, the water table fluctuates and may be within excavation prisms of the project. The Contractor shall divert and control water from the water table throughout the construction duration of the project at no additional cost to the Government. Dewatering may be needed during construction of guide dikes and gabion mattress.

Within 10 days after receipt of Notice to Proceed, the Contractor shall submit a control of water plan showing and detailing the method that he proposes to use to divert and control of water and protect each working area to the Contracting Officer. The control of water plan shall be within the construction limits. Damage to all work (including temporary construction), utilities, materials and equipment shall be repaired to the satisfaction of the Contracting Officer at the Contractor's expense, regardless of the cause of such damage. The Contractor shall grade all construction yards, easements and limits of construction which are disturbed by construction or construction related activities. Submission of final finished grading plans of diversion control of water shall be submitted for appproval by the Contracting Officer or as a minimum, to a condition similar to or better than the pre-existing condition.

1.1.2 Requirements

The Contractor is responsible for control of all runoff entering the construction area. The runoff will include water originating from upstream drainages; and in addition any and all seepage and groundwater originating within the work. The work site may be inundated because of runoff. The Contractor shall be responsible for protection of work site during times of runoff by his own means as described in his Storm Water Pollution Prevention Plan (SWPPP) as required per Section 01200 GENERAL REQUIREMENTS and Section 01354, ENVIRONMENTAL PROTECTION FOR CIVIL WORKS and shall be approved by the Contracting Officer.

1.1.3 Drainage Ditches

The location and depth of any drainage ditch to be constructed under this contract shall be subject to the approval of the Contracting Officer. Special precautions shall be taken to avoid impairing the permanent subgrade. Damaged subgrade shall be replaced in accordance with Section 02300 EARTHWORK by and at the expense of the Contractor.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The "RE" designates that the Resident Office will review the submittal for the Government. Submit the following in accordance with Section 01330, SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Control of Water Plan; G, RE.

The Contractor shall submit 3 copies of the plan.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --